

GenCore version 5.1.3
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OM nucleic - nucleic search, using sw model

Run on: January 21, 2003, 14:54:52 : Search time 159.389 Seconds
(without alignments)
268.450 Million cell updates/sec

Title: US-09-853-688-36

Perfect score: 19

Sequence: 1 ttaggaagctcgggtgc 19

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : N_Geneseq_101002:*

- 1: /SIDS2/gcgdata/geneseq/geneseq-emb1/NA1980.DAT:*
- 2: /SIDS2/gcgdata/geneseq/geneseq-emb1/NA1981.DAT:*
- 3: /SIDS2/gcgdata/geneseq/geneseq-emb1/NA1982.DAT:*
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- 19: /SIDS2/gcgdata/geneseq/geneseq-emb1/NA1998.DAT:*
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- 22: /SIDS2/gcgdata/geneseq/geneseq-emb1/NA2001A.DAT:*
- 23: /SIDS2/gcgdata/geneseq/geneseq-emb1/NA2001B.DAT:*
- 24: /SIDS2/gcgdata/geneseq/geneseq-emb1/NA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
|------------|-------|-------------|--------|-------------|--------------------|
| 1 | 19 | 100.0 | 19 | AAS18883 | Growth hormone 1 g |
| c | 2 | 19 | 100.0 | 3700 | 24 AAS18886 |
| 3 | 16.4 | 86.3 | 5333 | 22 AAS46366 | Tumour suppressor |
| 4 | 16.4 | 86.3 | 5333 | 24 ABL32783 | Human immune syste |
| c | 5 | 15.8 | 83.2 | 65 | 24 ABR31023 |
| c | 6 | 15.8 | 83.2 | 428 | 22 AAK54271 |
| 7 | 15.8 | 83.2 | 730 | 21 AAF08345 | Murine transport a |
| c | 8 | 15.8 | 83.2 | 1612 | 22 AAD11871 |
| c | 9 | 15.8 | 83.2 | 1612 | 22 AAD11872 |

| | | | | | | |
|---|----|------|------|-------|-------------|--------------------|
| c | 10 | 15.8 | 83.2 | 2246 | 16 AAQ74064 | Rat serotonin-1c c |
| c | 11 | 15.8 | 83.2 | 2246 | 19 AAV48290 | Rat 5-HT2C seroton |
| c | 12 | 15.8 | 83.2 | 2246 | 19 AAV48291 | Rat 5-HT2C S312F m |
| c | 13 | 15.8 | 83.2 | 2246 | 19 AAV48288 | Rat 5-HT2C seroton |
| c | 14 | 15.8 | 83.2 | 2246 | 19 AAV48289 | Rat 5-HT2C S312K m |
| c | 15 | 15.8 | 83.2 | 2246 | 19 AAV48279 | Rat 5-HT2C seroton |
| c | 16 | 15.8 | 83.2 | 6109 | 23 AAH78667 | Murine Col5a3 cDNA |
| c | 17 | 15.8 | 83.2 | 10329 | 21 AAZ50264 | Genomic DNA of pot |
| c | 18 | 15.8 | 83.2 | 10329 | 21 AAZ50653 | Genomic DNA encodi |
| c | 19 | 15.4 | 81.1 | 170 | 24 ABL77410 | Human ovarian canc |
| c | 20 | 15.4 | 81.1 | 456 | 22 ABA58575 | Human foetal liver |
| c | 21 | 15.4 | 81.1 | 456 | 22 AAK06696 | Human brain expres |
| c | 22 | 15.4 | 81.1 | 456 | 22 AAK32395 | Human bone marrow |
| c | 23 | 15.4 | 81.1 | 456 | 22 AAI38237 | Probe #6923 used t |
| c | 24 | 15.4 | 81.1 | 456 | 24 ABS07178 | Human genome-deriv |
| c | 25 | 15.4 | 81.1 | 700 | 22 AAH92715 | Human inflammatory |
| c | 26 | 15.4 | 81.1 | 881 | 24 AB046242 | Oligonucleotide fo |
| c | 27 | 15.4 | 81.1 | 881 | 24 AB046243 | Oligonucleotide fo |
| c | 28 | 15.4 | 81.1 | 901 | 24 AB033436 | Oligonucleotide fo |
| c | 29 | 15.4 | 81.1 | 901 | 24 AB033437 | Oligonucleotide fo |
| c | 30 | 15.4 | 81.1 | 1343 | 21 AAC59837 | Human secreted pro |
| c | 31 | 15.4 | 81.1 | 4038 | 10 AAN90382 | Genes encoding hum |
| c | 32 | 15.4 | 81.1 | 34917 | 22 AAK70686 | Human immune/haema |
| c | 33 | 15 | 78.9 | 392 | 24 ABK62503 | Rat sequence diffe |
| c | 34 | 15 | 78.9 | 2207 | 24 ABK63542 | Rat sequence diffe |
| c | 35 | 15 | 78.9 | 24757 | 22 AAS27687 | DNA encoding novel |
| c | 36 | 15 | 78.9 | 24757 | 22 AAS33481 | DNA encoding human |
| c | 37 | 14.8 | 77.9 | 393 | 21 AAF15743 | Human prostate can |
| c | 38 | 14.8 | 77.9 | 393 | 22 AAS00856 | Human CDNA clone H |
| c | 39 | 14.8 | 77.9 | 558 | 22 AAK36046 | Human bone marrow |
| c | 40 | 14.8 | 77.9 | 558 | 22 AAI41762 | Probe #10448 used |
| c | 41 | 14.8 | 77.9 | 640 | 22 AAH71209 | Human cervical can |
| c | 42 | 14.8 | 77.9 | 653 | 21 AAC75146 | Human ORFX ORF701 |
| c | 43 | 14.8 | 77.9 | 653 | 24 ABN25315 | Human ORFX polynuc |
| c | 44 | 14.8 | 77.9 | 698 | 22 AAF25821 | C. glutamicum quan |
| c | 45 | 14.8 | 77.9 | 787 | 23 AAS71701 | DNA encoding novel |

ALIGNMENTS

RESULT 1
AAS18883
ID AAS18883 standard; DNA; 19 BP.

XX AAS18883;

XX 12-MAR-2002 (first entry)

XX Growth hormone 1 gene (GH1) specific fragment, PCR primer GH1R.

XX Growth hormone 1; GH1; osteopathic; gene therapy; protein therapy;
KW diabetes; obesity; infection; acromegaly; gigantism; sodium retention;
KW water retention; metabolic syndrome; mood disorder; sleep disorder;
KW Growth hormone dysfunction; familial growth hormone deficiency;
KW short stature; pituitary storage defect; human; PCR primer; GH1R; ss.

OS Homo sapiens.

PN WO200185993-A2.

XX 15-NOV-2001.

XX 14-MAY-2001; 2001WO-G802126.

XX 12-MAY-2000; 2000GB-0011459.

XX 14-JUL-2000; 2000EP-0306004.

PA (UYWA-) UNIV WALES COLLEGE OF MEDICINE.

PI Cooper DN, Procter AM, Gregory J, Millar DS;

DR WPT; 2002-089798/12.

XX Detecting growth hormone variants (GHI), useful in screening patients
PT for growth hormone irregularities, comprises comparing the nucleotide
PT sequence of a GHI gene from a test sample with that of a standard
PT sequence of the human GHI -
XX
XX Example 2; Page 39; 95pp; English.
XX
XX The invention described a method of detecting variation in growth hormone
CC 1 (GHI), and therefore GH dysfunction in an individual. The method
CC comprises comparing the nucleotide sequence of GHI gene obtained from the
CC test sample with a standard human GHI gene sequence. In order to identify
CC variation (GHI variant). The method is useful in screening patients for
CC growth hormone irregularities or producing variant proteins for treating
CC irregularities, and for the early detection and appropriate clinical
CC management of familial GH deficiency. The GHI variants are useful in
CC therapeutic, diagnostic or detection method, particularly for determining
CC binding defects and susceptibility to a disease such as diabetes, obesity
CC or infection; for treating acromegaly or gigantism conditions associated
CC with lactogenic, diabetogenic, lipolytic and protein anabolic effects,
CC conditions associated with sodium and water retention, metabolic
CC syndromes, mood and sleep disorders; diagnosing GH dysfunction and
CC determining pituitary storage defects. The GHI variants are especially
CC useful in gene therapy or protein therapy. The GHI or GH variant may also
CC be used in the preparation of a medicament, diagnostics composition or
CC kit, or detection kit. The method has the advantage of: expanding the
CC know spectrum of GHI gene mutations; evaluating the role of GHI gene
CC mutations in the etiology of short stature; identifying of the mode of
CC inheritance of novel lesions; evaluation the effects of GHI mutations on
CC the structure and function of the GH molecule and development of rapid
CC diagnostic tests for inherited GH deficiency. This sequence is the GHI
CC PCR primer, GHJR, used with GHF (AAS18882) to amplify a GHI-specific
CC fragment, described in the method of the invention.

XX Sequence 19 BP; 3 A; 2 C; 9 G; 5 T; 0 other;

Query Match 100.0%; Score 19; DB 24; Length 19;
Best Local Similarity 100.0%; Pred. No. 4.9;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TGTAGGAAGTCTGGGTGC 19
|||||
DB 1 TGTAGGAAGTCTGGGTGC 19

RESULT 2
AAS18886/c
ID AAS18886 standard; DNA: 3700 BP.

XX AAS18886;

XX 12-MAR-2002 (first entry)

XX Growth hormone 1 gene (GHI), reference sequence.

XX Growth hormone 1; GHI; osteopathic; gene therapy; protein therapy;
KW diabetes; obesity; infection; acromegaly; gigantism; sodium retention;
KW water retention; metabolic syndrome; mood disorder; sleep disorder;
KW Growth hormone dysfunction; familial growth hormone deficiency;
KW short stature; pituitary storage defect; human; chromosome 17q23; ds.

XX Homo sapiens.

XX Key Location/Qualifiers

FT sig_peptide 763..1100

FT CDS 763..2230

FT /tag= a

FT /tag= b

FT /product= "GHI"

FT /note= "Growth hormone 1"

FT variation replace(124,G)

FT /tag= c

FT /standard_name= "Single nucleotide polymorphism"

variation replace(128,T)
FT /tag= d
FT /standard_name= "Single nucleotide polymorphism"
variation replace(134,G)
FT /tag= e
FT /standard_name= "Single nucleotide polymorphism"
FT replace(135,T)
FT /tag= f
FT /standard_name= "Single nucleotide polymorphism"
FT replace(135,C)
FT /tag= g
FT /standard_name= "Single nucleotide polymorphism"
FT replace(136,G)
FT /tag= h
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FT replace(141,G)
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FT replace(179,C)
FT /tag= j
FT /standard_name= "Single nucleotide polymorphism"
FT replace(188,T)
FT /tag= k
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FT replace(218,A)
FT /tag= l
FT /standard_name= "Single nucleotide polymorphism"
FT replace(226,G)
FT /tag= m
FT /standard_name= "Single nucleotide polymorphism"
FT replace(230,C)
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FT replace(519,T)
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FT replace(565,G)

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FT /number= 1
FT 773..1032
FT /tag= ao
FT /number= 1
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FT replace(883,A)
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FT /standard_name=
FT replace(901,C)
FT /tag= at "Single nucleotide polymorphism"
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FT replace(1010,T)
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FT 1033..1193
FT /tag= av
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FT /standard_name=
FT replace(1101,T)
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FT 1101..2227
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FT /label= "mature_GH1"
FT replace(1114,T)
FT /tag= az
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FT variation /standard_name= "Single nucleotide polymorphism"
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FT replace(1182,T)
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FT replace(1189,G)
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FT replace(1193,G)
FT /tag= bd "Single nucleotide polymorphism"
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FT 1194..1402
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FT replace(1208,C)
FT /tag= bh "Single nucleotide polymorphism"
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FT replace(1212,T)
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FT 100.0%; Score 19; DB 24; length 3700;
Query Match
Best Local Similarity 100.0%; Pred. No. 6.4;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 TGTAGGAAGTCCTGGGTGC 19
|||||
Db 3316 TGTAGGAAGTCCTGGGTGC 3298
|||||
RESULT 3
AAS46366
ID AAS46366 standard: DNA: 5333 BP.
XX AC AAS46366;
XX AC AAS46366;
XX 18-DEC-2001 (first entry)
XX Tumour suppressor gene derived chemically modified sequence #88.
XX Human; tumour suppressor gene; oncogene; antitumour; cytostatic;
KW cancer; tumour; CpG dinucleotide; single-nucleotide polymorphism; SNP;
KW cytosine methylation; ds.
XX Homo sapiens.
XX WO200168912-A2.
XX 20-SEP-2001.
XX 15-MAR-2001; 2001WO-EP02955.
XX 15-MAR-2000; 2000DE-1013847.
PR 06-APR-2000; 2000DE-1019058.
PR 07-APR-2000; 2000DE-1019173.
PR 30-JUN-2000; 2000DE-1032529.
XX 01-SEP-2000; 2000DE-1043826.
XX (EPIC-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
PI WPI: 2001-602752/68.
XX Fragments of chemically modified genes associated with tumour suppressor
PT
```


transcription units that populate a genome. The library comprises several oligonucleotides, each capable of hybridizing selectively to a set of messenger RNAs transcribed from a given transcription unit of the genome, which encodes one or more messenger RNA splice variants. The oligonucleotide libraries are useful for detecting mRNAs from a biological sample, in expression profiling studies, in qualitatively or quantitatively characterizing the corresponding transcriptome, and in detecting RNA transcripts and splice variants of human or animal transcriptomes. The libraries may also be used as specialized mini libraries to detect transcripts of a sub-transcriptome under a particular biological or pathological state, and so allowing the detection of tissue- and pathology-specific genes such as those genes only expressed in specific tissue under a specific pathological condition; to detect developmental specific genes; and to detect RNA transcripts and splice variants of a transcriptome of a patient suffering from a particular disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from rats, humans and mice, which are used in the exemplification of the present invention.

N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.

Query Match 83.2%; Score 15.8; DB 24; Length 65;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1 TGTAGGAAGTCTGGGTGC 19
|||||
Db 53 TGTAGGAAGTCTGGGTGC 35

RESULT 6
AAK34271/c
ID AAK54271 standard; cDNA; 428 BP.
AC AAK54271;
DT 16-NOV-2001 (first entry)
DE Murine transport and binding associated protein encoding cDNA SEQ ID 836.
XX Murine; liver; gene library; amino acid synthesis; binding protein;
XX cell metabolism; energy metabolism; fatty acid metabolism; synthesis;
KW phospholipid metabolism; purine; pyrimidine; nucleoside; nucleotide;
KW replication; transcription; translation; transport protein; ss.
XX Mus musculus.
OS
XX DE20103510-U1.
XX 07-JUN-2001.
XX 28-FEB-2001; 2001DE-2003510.
XX 02-DEC-1999; 99DE-1058160.
XX (LION-) LION BIOSCIENCE AG.
XX WPI; 2001-366570/39.
XX Gene library containing sequences with specific 3'-ends and no polyA tail, encoding proteins involved in a wide range of cellular processes
PT
XX
XX Claim 15; Page 250; 251pp; German.
XX This invention describes a novel gene library (A) comprises a gene sequence (or its part) encoding a protein involved in amino acid synthesis, cellular/energy metabolism, metabolism of fatty acids/phospholipids, synthesis or breakdown of purines/pyrimidines/nucleosides/nucleotides, DNA

replication/transcription/translation, or is a transport/binding protein. (A) are produced that correspond to the 3'-end of mRNA but without the polyA tail. They can be prepared more efficiently and with less effort than conventional libraries. AAK54346-AAK54275 represent fragments of the gene library described in the method of the invention.

Query Match 83.2%; Score 15.8; DB 22; Length 428;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1 TGTAGGAAGTCTGGGTGC 19
|||||
Db 126 TGAAGGAAGTCTGGGTGC 108

RESULT 7
AAF08345
ID AAF08345 standard; cDNA; 730 BP.
XX
AC AAF08345;
XX
DT 13-MAR-2001 (first entry)
XX Fusarium venenatum EST SEQ ID NO: 868.
XX Multiple gene expression; filamentous fungal cell; EST;
KW expressed sequence tag; Fusarium venenatum; Aspergillus niger;
KW Aspergillus oryzae; Trichoderma reesei; identification; recombination;
KW culture condition; environmental stress; spore morphogenesis;
KW metabolic pathway engineering; catabolic pathway engineering; ss.
XX Fusarium venenatum.
XX WO2000056762-A2.
XX 28-SEP-2000.
XX 22-MAR-2000; 2000WO-US07781.
XX 22-MAR-1999; 99US-0273623.
XX (NOVO) NOVO NORDISK BIOTECH INC.
XX (NOVO) NOVO NORDISK AS.
XX Berka RM, Key MW, Shuster JR, Kauppinen S, Clausen IG, Olsen PB;
XX WPI; 2000-594572/56.
XX Monitoring differential expression of genes in filamentous fungal cells
XX uses fluorescence-labeled nucleic acids isolated from the cells and a
XX substrate of expressed sequence tags .
XX Claim 86; Page 715; 3161pp; English.
XX The present invention describes a method for monitoring differential
XX expression of genes in a first filamentous fungal (FF) cell relative to
XX expression of the same genes in one or more second filamentous fungal
XX cells. The method uses fluorescence-labeled nucleic acids isolated from
XX the FF cells and a substrate of expressed sequence tags (EST). The ESTs
XX are used in the methods for monitoring differential expression of genes
XX in a first filamentous fungal (FF) cell relative to expression of the
XX same genes in one or more second filamentous fungal cells. Monitoring
XX the global expression of genes from FF cells allows the production
XX potential of the microorganisms to be improved. New genes may be
XX discovered, possible functions of unknown open reading frames can be
XX identified and gene copy number variation and stability can be
XX monitored. The expression of genes can be used to study how FF cells
XX adapt to changes in culture conditions, environmental stress, spore
XX morphogenesis, recombination, metabolic or catabolic pathway
XX engineering. Using ESTs provides several advantages over genomic or
XX random cDNA clones including elimination of redundancy as one spot on an

CC different from the wild type BMP1B polypeptide sequence and which has
CC the ability to modulate ovulation in a female mammal. Mutation in
CC the BMP1B receptor gene is responsible for increased ovulation rate
CC in sheep derived from Booroola Merino strain that carry an autosomal
CC mutation in *FecB/Booroola* gene. The *FecB* gene is mapped to chromosome 6.
CC The BMP1B receptor of the invention and the polynucleotide encoding
CC it are useful for modulating the ovulation rate of a female vertebrate.
CC Identification of mutated BMP1B receptor nucleic acid molecule in a
CC vertebrate, is useful for assessing fecundity in vertebrate such as
CC humans and other commercially important mammals and birds including
CC sheep, cattle, horses, goats, deer, pigs, cats, dogs, possums, and
CC poultry. The polypeptide is useful to raise antibodies and for reducing
CC unwanted populations of feral vertebrates. The polynucleotide is useful
CC for identifying sequence variants in individual animals that are
CC associated with increased ovulation. The present sequence is mutated
CC BMP1B receptor cDNA from Booroola sheep. The BMP1B receptor is a
CC member of transforming growth factor-beta family.
XX
SQ Sequence 1612 BP; 472 A; 359 C; 395 G; 386 T; 0 other;

Query Match 83.2%; Score 15.8; DB 22; Length 1612;
Best Local Similarity 89.5%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TGTAGGAAGTCTGGGGTGC 19
DB 420 TGGAGGAAGTCTGGGGTGC 402
IIIIIIIIIIIIIIIIIIII

RESULT 10
AA074064/c
ID AA074064 standard; cDNA to mRNA; 2246 BP.
XX
AC AA074064;
XX
XX
DT 29-JAN-1996 (first entry)
DE Rat serotonin-1c cDNA.
XX Serotonin; primer; mRNA; specificity; pharmaceutical; ss.
KW Rattus rattus.
OS JP07123984-A.
PN 16-MAY-1995.
PD 05-NOV-1993; 93JP-0275852.
PF 05-NOV-1993; 93JP-0275852.
XX (HITB) HITACHI CHEM CO LTD.
PA WPI; 1995-211627/28.
DR
XX A primer for the detection and the determin. of a specific messenger
PT RNA - can detect and determine specific mRNA(s) with high
PT reliability
XX
PS Example 28; Page 30-31; 35pp; Japanese.
XX
XX AA074064 is rat serotonin 1c cDNA. This cDNA is amplified by the
CC primers AA074047 and AA074048. The primers are used specifically for the
CC detection and isolation of this sequence. They have the advantage of
CC high sensitivity and reliability and are useful in the pharmaceutical
CC industry.
XX
SQ Sequence 2246 BP; 532 A; 542 C; 544 G; 628 T; 0 other;

Query Match 83.2%; Score 15.8; DB 16; Length 2246;
Best Local Similarity 89.5%; Pred. No. 2.4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TGTAGGAAGTCTGGGGTGC 19
DB 2096 TGTAGGAAGTCTGGGGTGC 2078
IIIIIIIIIIIIIIIIIIII

RESULT 11
AAV48290/c
ID AAV48290 standard; DNA; 2246 BP.
XX
AC AAV48290;
XX
DT 21-JAN-1999 (first entry)
DE Rat 5-HT2C serotonin receptor S312F mutant DNA.
XX
DE Rat 5-HT2C serotonin receptor; G-protein-coupled receptor;
KW constitutively activated monoamine G protein-coupled receptor;
KW screen; agonist; inverse agonist; antagonist; mutant; ss.
XX
OS Synthetic.
OS Rattus sp.
XX
FH Key Location/Qualifiers
FT CDS 688..2070
FT /*Lag= a
FT /product= Mutant 5-HT2C serotonin receptor
FT 1621..1623
FT /*Lag= b
FT /note= "codon has been changed from TCC to TTC"
XX
PN W09838217-A1.
XX
PD 03-SFP-1998.
XX 27-FEB-1998; 98WO-US03991.
XX 07-OCT-1997; 97US-0061268.
PR 27-FEB-1997; 97US-0039465.
XX
XX (EGAN/) EGAN C C.
PA (HERR/) HERRICK-DAVIS K.
PA (TEIT/) TEITLER M.
XX
PI Egan CC, Herrick-Davis K, Teitler M;
XX
XX WPI; 1998-495389/42.
DR P-PSDB; AAW77113.
XX
XX Method of constitutively activating targeted G-protein coupled
PT monoamine receptor - comprises use of site directed mutagenesis,
PT useful for, e.g. screening for agonists and antagonists of native
PT receptor
XX
XX Example 2; Fig 35; 97pp; English.
XX
XX The present sequence encodes a rat 5-HT2C serotonin receptor S312F
CC mutant. 5-HT2C is a G-protein-coupled receptor. The sequence of the
CC wild type receptor (AAV48279) is modified using the method of the
CC invention to produce the present sequence. The mutant receptor exists
CC in a constitutively activated state exhibiting both a greater response
CC to agonists and a coupling to the G protein second messenger system
CC even in the absence of agonists. The constitutively activated monoamine
CC G protein-coupled receptor can be used to screen for agonists, inverse
CC agonists, and antagonists of the native receptor.
XX
SQ Sequence 2246 BP; 537 A; 542 C; 538 G; 629 T; 0 other;

Query Match 83.2%; Score 15.8; DB 19; Length 2246;
Best Local Similarity 89.5%; Pred. No. 2.4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TGTAGGAAGTCTGGGGTGC 19
IIIIIIIIIIIIIIIIIIII

```
Db 2096 TGTAGGAAGTCTGGCTGC 2078
RESULT 12
AAV48291/c
ID AAV48291 standard; DNA; 2246 BP.
XX AC AAV48291;
XX DT 21-JAN-1999 (first entry)
XX DE Rat 5-HT2C S312F mutant receptor DNA with a unique restriction site.
XX KW Rat 5-HT2C serotonin receptor; G-protein-coupled receptor;
XX KW constitutively activated monamine G protein-coupled receptor;
XX KW screen; agonist; inverse agonist; antagonist; mutant; ss.
XX OS Synthetic.
XX OS Rattus sp.
XX FH Key Location/Qualifiers
XX CDS 688..2070
XX FT /*tag= a
XX FT /product= Mutant 5-HT2C serotonin receptor
XX FT 1621..1623
XX FT /*tag= b
XX FT /note= "codon has been changed from TCC to TTC"
XX FT mutation
XX FT 1629
XX FT /*tag= c
XX FT /note= "C changed to A to create a ScaI site"
XX PN W09838217-A1.
XX PD 03-SEP-1998.
XX PF 27-FEB-1998; 98WO-US03991.
XX PR 07-OCT-1997; 97US-0061268.
XX PR 27-FEB-1997; 97US-0039465.
XX PA (EGAN/) EGAN C. C.
XX PA (HERR/) HERRICK-DAVIS K.
XX PA (TEIT/) TEITLER M.
XX PI Egan CC, Herrick-Davis K, Teitler M;
XX DR WPI; 1998-495389/42.
XX PT Method of constitutively activating targeted G-protein coupled
XX PT monoamine receptor - comprises use of site directed mutagenesis,
XX PT useful for, e.g. screening for agonists and antagonists of native
XX PT receptor
XX PS Claim 20; Fig 36; 97pp; English.
XX CC The present sequence encodes a rat 5-HT2C serotonin receptor S312F
XX CC mutant. The present sequence contains a ScaI restriction site. 5-HT2C
XX CC is a G-protein-coupled receptor. The sequence of the wild type receptor
XX CC (AAV48279) is modified using the method of the invention to produce the
XX CC present sequence. The mutant receptor exists in a constitutively
XX CC activated state exhibiting both a greater response to agonists and a
XX CC coupling to the G protein second messenger system even in the absence
XX CC of adonists. The constitutively activated monamine G protein-coupled
XX CC receptor can be used to screen for agonists, inverse agonists, and
XX CC antagonists of the native receptor.
XX SO Sequence 2246 BP; 538 A; 541 C; 538 G; 629 T; 0 other;
Query Match 83.2%; Score 15.8; DB 19; Length 2246;
Best Local Similarity 89.5%; Pred. No. 2.4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy 1 TGTAGGAAGTCTGGCTGC 19
```

```
Db 2096 TGTAGGAAGTCTGGCTGC 2078
|||||
RESULT 13
AAV48288/c
ID AAV48288 standard; DNA; 2246 BP.
XX AC AAV48288;
XX DT 21-JAN-1999 (first entry)
XX DE Rat 5-HT2C serotonin receptor S312K mutant DNA.
XX KW Rat 5-HT2C serotonin receptor; G-protein-coupled receptor;
XX KW constitutively activated monamine G protein-coupled receptor;
XX KW screen; agonist; inverse agonist; antagonist; mutant; ss.
XX OS Synthetic.
XX OS Rattus sp.
XX FH Key Location/Qualifiers
XX CDS 688..2070
XX FT /*tag= a
XX FT /product= Mutant 5-HT2C serotonin receptor
XX FT 1621..1623
XX FT /*tag= b
XX FT /note= "codon has been changed from TCC to AAG"
XX PN W09838217-A1.
XX PD 03-SEP-1998.
XX PF 27-FEB-1998; 98WO-US03991.
XX PR 07-OCT-1997; 97US-0061268.
XX PR 27-FEB-1997; 97US-0039465.
XX PA (EGAN/) EGAN C. C.
XX PA (HERR/) HERRICK-DAVIS K.
XX PA (TEIT/) TEITLER M.
XX PI Egan CC, Herrick-Davis K, Teitler M;
XX DR WPI; 1998-495389/42.
XX DR P-PSDB; AAW77112.
XX PT Method of constitutively activating targeted G-protein coupled
XX PT monoamine receptor - comprises use of site directed mutagenesis,
XX PT useful for, e.g. screening for agonists and antagonists of native
XX PT receptor
XX PS Example 2; Fig 32; 97pp; English.
XX CC The present sequence encodes a rat 5-HT2C serotonin receptor S312K
XX CC mutant. 5-HT2C is a G-protein-coupled receptor. The sequence of the
XX CC wild type receptor (AAV48279) is modified using the method of the
XX CC invention to produce the present sequence. The mutant receptor exists
XX CC in a constitutively activated state exhibiting both a greater response
XX CC to agonists and a coupling to the G protein second messenger system
XX CC even in the absence of agonists. The constitutively activated monamine
XX CC G protein-coupled receptor can be used to screen for agonists, inverse
XX CC agonists, and antagonists of the native receptor.
XX SO Sequence 2246 BP; 539 A; 541 C; 539 G; 627 T; 0 other;
Query Match 83.2%; Score 15.8; DB 19; Length 2246;
Best Local Similarity 89.5%; Pred. No. 2.4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy 1 TGTAGGAAGTCTGGCTGC 19
Db 2096 TGTAGGAAGTCTGGCTGC 2078
```


DB 2096 TGTAGGAAGTCTCGCTGC 2078

RESULT 14
AAV48289/c
ID AAV48289 standard; DNA: 2246 BP.
XX
XX AAV48289;
XX
XX 21-JAN-1999 (first entry)
XX
XX Rat 5-HT2C S312K mutant receptor DNA with a unique restriction site.
XX
XX Rat 5-HT2C serotonin receptor; G-protein-coupled receptor;
XX
XX constitutively activated monoamine G protein-coupled receptor;
XX
XX screen; agonist; inverse agonist; antagonist; mutant; ss.
XX
XX Synthetic.
XX
XX Rattus sp.
XX
XX Location/Qualifiers
XX
XX Key 688..2070
XX
XX CDS /tag= a
XX
XX /product= Mutant 5-HT2C serotonin receptor
XX
XX mutation 1621..1623
XX
XX /tag= b
XX
XX /note= codon has been changed from TCC to AAG
XX
XX mutation 1629
XX
XX /tag= c
XX
XX /note= *C changed to A to create a ScaI site"
XX
XX WO9838217-A1.
XX
XX 03-SEP-1998. 98WO-US039465.
XX
XX 27-FEB-1998; 98WO-US039465.
XX
XX 07-OCT-1997; 97US-0061268.
XX
XX 27-FEB-1997; 97US-0039465.
XX
XX (EGAN/) EGAN C C.
XX
XX (HERR/) HERRICK-DAVIS K.
XX
XX (TEIT/) TEITLER M.
XX
XX Egan CC, Herrick-Davis K, Teitler M;
XX
XX WPI; 1998-495389/42.
XX
XX Method of constitutively activating targeted G-protein coupled
XX
XX monoamine receptor - comprises use of site directed mutagenesis,
XX
XX useful for, e.g. screening for agonists and antagonists of native
XX
XX receptor
XX
XX Claim 19; Fig 33; 97pp; English.
XX
XX The present sequence encodes a rat 5-HT2C serotonin receptor S312K
XX
XX mutant. The present sequence contains a ScaI restriction site. 5-HT2C
XX
XX is a G-protein-coupled receptor. The sequence of the wild type receptor
XX
XX (AAV48279) is modified using the method of the invention to produce the
XX
XX present sequence. The mutant receptor exists in a constitutively
XX
XX activated state exhibiting both a greater response to agonists and a
XX
XX coupling to the G protein second messenger system even in the absence
XX
XX of agonists. The constitutively activated monoamine G protein-coupled
XX
XX receptor can be used to screen for agonists, inverse agonists, and
XX
XX antagonists of the native receptor.
XX
XX Sequence 2246 BP; 540 A; 540 C; 539 G; 627 T; 0 other;
XX

RESULT 15
AAV48279/c
ID AAV48279 standard; DNA: 2246 BP.
XX
XX AAV48279;
XX
XX 21-JAN-1999 (first entry)
XX
XX Rat 5-HT2C serotonin receptor DNA.
XX
XX Rat 5-HT2C serotonin receptor; G-protein-coupled receptor;
XX
XX constitutively activated monoamine G protein-coupled receptor;
XX
XX screen; agonist; inverse agonist; antagonist; ss.
XX
XX Rattus sp.
XX
XX Location/Qualifiers
XX
XX Key 688..2070
XX
XX CDS /tag= a
XX
XX /product= 5-HT2C serotonin receptor
XX
XX WO9838217-A1.
XX
XX 03-SEP-1998. 98WO-US039991.
XX
XX 27-FEB-1998; 98WO-US039991.
XX
XX 07-OCT-1997; 97US-0061268.
XX
XX 27-FEB-1997; 97US-0039465.
XX
XX (EGAN/) EGAN C C.
XX
XX (HERR/) HERRICK-DAVIS K.
XX
XX (TEIT/) TEITLER M.
XX
XX Egan CC, Herrick-Davis K, Teitler M;
XX
XX WPI; 1998-495389/42.
XX
XX P-PSDB; AAW77105.
XX
XX Method of constitutively activating targeted G-protein coupled
XX
XX monoamine receptor - comprises use of site directed mutagenesis,
XX
XX useful for, e.g. screening for agonists and antagonists of native
XX
XX receptor
XX
XX Disclosure; Fig 2A; 97pp; English.
XX
XX The present sequence encodes a rat 5-HT2C serotonin receptor. This
XX
XX is a G-protein-coupled receptor. The sequence of the receptor is
XX
XX modified (see AAV48288-91) using the method of the invention so
XX
XX that the receptor exists in a constitutively activated state exhibiting
XX
XX both a greater response to agonists and a coupling to the G protein
XX
XX second messenger system even in the absence of agonists. The
XX
XX constitutively activated monoamine G protein-coupled receptor can be
XX
XX used to screen for agonists, inverse agonists, and antagonists of the
XX
XX native receptor.
XX
XX Sequence 2246 BP; 537 A; 543 C; 538 G; 628 T; 0 other;
XX

Query Match 83.2%; Score 15.8; DB 19; Length 2246;
Best Local Similarity 89.5%; Pred. NO. 2.4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1 TGTAGGAAGTCTCGGCTGC 19
|||||

DB 2096 TGTAGGAAGTCTCGCTGC 2078
Search completed: January 21, 2003, 16:28:00
Job time : 161.389 secs

Query Match 83.2%; Score 15.8; DB 19; Length 2246;
Best Local Similarity 89.5%; Pred. NO. 2.4e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

GenCore version 5.1.3
Copyright (c) 1993 - 2003 CompuGen Ltd.

(M) nucleic - nucleic search, using sw model

Run on: January 21, 2003, 14:52:32 : Search time 1198.97 Seconds
(without alignments)
229.633 Million cell updates/sec

Title: US-09-853-688-35

Perfect score: 17
Sequence: 1 gggagccccagcaatgc 17

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 16154066 seqs, 8097743376 residues

Total number of hits satisfying chosen parameters: 32308132

Minimum bB seq length: 0

Maximum DB seq length: 20000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :

EST: *
1: em_estba: *
2: em_esthum: *
3: em_estin: *
4: em_estvm: *
5: em_estov: *
6: em_estpl: *
7: em_estro: *
8: em_hic: *
9: gb_estl: *
10: gb_est2: *
11: gb_hic: *
12: gb_est3: *
13: gb_est4: *
14: gb_est5: *
15: em_estfun: *
16: em_estom: *
17: gb_gss: *
18: em_gss_hum: *
19: em_gss_inv: *
20: em_gss_pln: *
21: em_gss_vrt: *
22: em_gss_fun: *
23: em_gss_mam: *
24: em_gss_mus: *
25: em_gss_other: *
26: em_gss_pro: *
27: em_gss_rod: *

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result, being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------------|--------------------|
| 1 | 16 | 94.1 | 461 | 10 AW558892 | AW558892 L0301D12- |
| 2 | 16 | 94.1 | 619 | 17 BH108836 | BH108836 RPC1-24-2 |
| 3 | 16 | 94.1 | 621 | 12 BG324158 | BG324158 602423116 |
| 4 | 16 | 94.1 | 636 | 10 AW239325 | AW239325 xb39a04.y |
| 5 | 16 | 94.1 | 642 | 12 BG076347 | BG076347 H3158F07- |
| 6 | 16 | 94.1 | 774 | 12 BG704650 | BG704650 602688222 |

| | | | | | | |
|---|----|------|------|-----|----|----------|
| C | 7 | 16 | 94.1 | 976 | 13 | BM468789 |
| C | 8 | 15.4 | 90.6 | 300 | 9 | AA852498 |
| C | 9 | 15.4 | 90.6 | 319 | 10 | AW067967 |
| C | 10 | 15.4 | 90.6 | 320 | 9 | A1449767 |
| C | 11 | 15.4 | 90.6 | 336 | 9 | AA629118 |
| C | 12 | 15.4 | 90.6 | 382 | 17 | BH842232 |
| C | 13 | 15.4 | 90.6 | 382 | 17 | BH845093 |
| C | 14 | 15.4 | 90.6 | 383 | 13 | BT005357 |
| C | 15 | 15.4 | 90.6 | 385 | 17 | BT14181 |
| C | 16 | 15.4 | 90.6 | 393 | 9 | AT752118 |
| C | 17 | 15.4 | 90.6 | 406 | 12 | BF406319 |
| C | 18 | 15.4 | 90.6 | 411 | 9 | AA536528 |
| C | 19 | 15.4 | 90.6 | 411 | 12 | BF856554 |
| C | 20 | 15.4 | 90.6 | 412 | 14 | R45494 |
| C | 21 | 15.4 | 90.6 | 413 | 9 | AT751985 |
| C | 22 | 15.4 | 90.6 | 416 | 13 | BT239628 |
| C | 23 | 15.4 | 90.6 | 420 | 9 | AT751499 |
| C | 24 | 15.4 | 90.6 | 424 | 9 | AT751854 |
| C | 25 | 15.4 | 90.6 | 425 | 10 | BB268875 |
| C | 26 | 15.4 | 90.6 | 440 | 9 | AT751606 |
| C | 27 | 15.4 | 90.6 | 454 | 9 | AA391288 |
| C | 28 | 15.4 | 90.6 | 457 | 9 | AT750858 |
| C | 29 | 15.4 | 90.6 | 468 | 13 | BT243443 |
| C | 30 | 15.4 | 90.6 | 501 | 14 | BM727488 |
| C | 31 | 15.4 | 90.6 | 512 | 13 | BT363494 |
| C | 32 | 15.4 | 90.6 | 512 | 13 | BT403236 |
| C | 33 | 15.4 | 90.6 | 537 | 13 | BT371847 |
| C | 34 | 15.4 | 90.6 | 540 | 9 | AU144696 |
| C | 35 | 15.4 | 90.6 | 549 | 13 | BT238029 |
| C | 36 | 15.4 | 90.6 | 562 | 13 | BT486096 |
| C | 37 | 15.4 | 90.6 | 581 | 14 | W22315 |
| C | 38 | 15.4 | 90.6 | 584 | 9 | AA160661 |
| C | 39 | 15.4 | 90.6 | 587 | 9 | AT520081 |
| C | 40 | 15.4 | 90.6 | 589 | 12 | BG162438 |
| C | 41 | 15.4 | 90.6 | 591 | 14 | BM931980 |
| C | 42 | 15.4 | 90.6 | 594 | 14 | BM685020 |
| C | 43 | 15.4 | 90.6 | 597 | 13 | BT239575 |
| C | 44 | 15.4 | 90.6 | 607 | 13 | BT162042 |
| C | 45 | 15.4 | 90.6 | | | |

ALIGNMENTS

RESULT 1
AW558892 461 bp mRNA linear EST 31-AUG-2000
LOCUS L0301D12-3 NIA Mouse Newborn Ovary CDNA Library Mus musculus CDNA
DEFINITION clone L0301D12 3', mRNA sequence.
ACCESSION AW558892 GI:7204321
VERSION AW558892.1
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. Tanaka.T.S., Jaradat.S.A., Lim.M.K., Kargul.G.J., Wang.X., Grahovac.M.J., Pantano.S., Sano.Y., Piao.Y., Nagaraja.R., Dol.H., Wood.W.H., III, Becker.K.G. and Ko.M.S.H.
AUTHORS Genome-wide expression profiling of mid-gestation placenta and embryo using a 15,000 mouse developmental cDNA microarray
JOURNAL Proc. Natl. Acad. Sci. U.S.A. 97 (16), 9127-9132 (2000)
MEDLINE 20381348
COMMENT Contact: George J. Kargul
Laboratory of Genetics
National Institute on Aging/National Institutes of Health
333 Cassell Drive, Suite 4000, Baltimore, MD 21224-6820, USA
Email: cdna@ngsun.grc.nia.nih.gov
Plate: L0301 row: D column: 12
Seq primer: -21M3 Forward
High quality sequence stop: 461
POLYA=Yes.

FEATURES source

Location/Qualifiers

1..461

/organism="Mus musculus"

/strain="C57Bl/6J"

/db_xref="niaEST:L0301012-3"

/db_xref="taxon:10090"

/clone="L0301012"

/clone_lib="NIA Mouse Newborn Ovary cDNA Library"

/sex="female"

/dev_stage="Newborn Ovary"

/lab_host="DH10B"

/note="Vector: pSPORT1 (Gibco/BRL Life Technology); Site_1: SalI; Site_2: NotI; Total RNAs were extracted from 7 Newborn Ovary. The double-stranded cDNA was synthesized by Gibco's kit with an Oligo(dT) primer [NotI primer-adaptor from GibcoBRL]

15'-GCAGTACTGTCAGATCGGAGCGCCCTTTTTTTTTTTT-3' from 2.56kb of total RNA. The double-stranded cDNAs were treated with T4 DNA polymerase and purified by ethanol-precipitation. The cDNAs were ligated to lone-linker L1-SalI (include SalI sequence). The cDNAs were purified by phenol/chloroform and separated from free linkers by Centricon 100. Then, cDNAs were amplified by long-range high fidelity PCR using Takara's Ex Taq polymerase. Then, the cDNAs were purified by phenol/chloroform and by Centricon 100. The cDNAs were digested with SalI and NotI enzymes. Then, the cDNAs were size selected by Gibco's Size Fractionation Column. The cDNAs were cloned into SalI/NotI site of pSPORT1 plasmid vector. The DH10B E. coli host was transformed with the ligation mixture by chemical method. The library was constructed by Xiaohong Wang and Yulan Piao."

BASE COUNT 125 a 86 c 126 g 124 t

ORIGIN

Query Match 94.1%; Score 16; DB 10; Length 461;

Best Local Similarity 100.0%; Pred. No. 2.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGAGCCCCAGCAATG 16

|||||

DB 240 GGGAGCCCCAGCAATG 295

RESULT 2

BH108836

LOCUS

DEFINITION

BH108836 619 bp DNA linear GSS 19-JUL-2001

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 619)

REFERENCE

AUTHORS

Tsengay,C., Geer,K., Krol,M., Shvartsbeyn,A., Gebregeorgis,E., Russell,D., de Jong,P. and Fraser,C.M.

Mouse BAC End Sequences from Library RPCI-24

Other GSSs: RPCI-24-238C2.TJ

Unpublished (1999)

Contact: Shaying Zhao

Department of Eukaryotic Genomics

The Institute for Genomic Research

9712 Medical Center Dr., Rockville, MD 20850, USA

Tel: 301 838 0200

Fax: 301 838 0208

Email: szhao@tigr.org

Clones are derived from the mouse BAC library RPCI-24. For BAC library availability, please contact Pieter de Jong (pdejong@mail.cho.org). Clones may be purchased from BACPAC

Resources (http://www.choi.org/bacpac/orderingframe.htm). BAC end page: http://www.tigr.org/tdb/bac_ends/mouse/bac_end_intro.html

Plate: 238 row: C column: 2

Seq primer: T7

Class: BAC ends.

FEATURES source

Location/Qualifiers

1..619

/organism="Mus musculus"

/strain="C57Bl/6J"

/db_xref="taxon:10090"

/clone="RPCI-24-238C2"

/clone_lib="RPCI-24"

/sex="Male"

/cell_type="Spleen/Brain"

/note="Vector: pTAR8AC1; Site_1: BamHI; Site_2: BamHI; RPCI-24 Mouse BAC Library produced by Pieter de Jong. The library was cloned in the pTAR8AC1 cloning vector at the BamHI sites using MboI partially digested male C57Bl/6J DNA."

BASE COUNT 138 a 149 c 172 g 160 t

ORIGIN

Query Match 94.1%; Score 16; DB 17; Length 619;

Best Local Similarity 100.0%; Pred. No. 2.3e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGAGCCCCAGCAATG 16

|||||

DB 207 GGGAGCCCCAGCAATG 222

RESULT 3

BG324158/c

LOCUS

DEFINITION

BG324158 621 bp mRNA linear EST 27-FEB-2001

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo. 1 (bases 1 to 621)

REFERENCE

AUTHORS

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: DCTD/DTP

cDNA Library Preparation: Ling Hong/Rubin Laboratory

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov

Plate: LLCM1271 row: o column: 04

High quality sequence stop: 615.

Location/Qualifiers

1..621

/organism="Homo sapiens"

/db_xref="taxon:9606"

/clone="IMAGE:4561371"

/clone_lib="NIH-MGC_14"

/tissue_type="renal cell adenocarcinoma"

/lab_host="DH10B (phage-resistant)"

/note="Organ: kidney; Vector: pOT87; Site_1: XhoI; Site_2: EcoRI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit

```

BASE COUNT      128 a      185 c      188 g      120 t
ORIGIN
Query Match      94.1%; Score 16; DB 12; Length 621;
Best Local Similarity 100.0%; Pred. No. 2.3e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2      GGAGCCCGCAGCAATGC 17
|||||
Db      41      GGAGCCCGCAGCAATGC 16

RESULT 4
LOCUS      AW239325/c
DEFINITION      xb39a04.y1 NCI_CGAP_Lu31 Homo sapiens cDNA clone IMAGE:2578638 5'
similar to gb:J03934 NAD(P)H DEHYDROGENASE (HUMAN);, mRNA sequence.
ACCESSION      AW239325
VERSION      AW239325.1 GI:6571715
KEYWORDS      EST.
SOURCE      human.
ORGANISM      Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 636)
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_lib="NCI_CGAP_Lu31"
/dev_stage="fetal, 14 wk post-conception"
/lab_host="DH10B"
/notes="Organ: lung, cell line; Vector: pCMV-SPORT6;
Site_1: EcorV; Site_2: NotI; Cloned unidirectionally, no
5' adaptor. Primer: Oligo dT. Full-length library
constructed by Life Technologies."

BASE COUNT      154 a      170 c      168 g      143 t      1 others
ORIGIN
Query Match      94.1%; Score 16; DB 10; Length 636;
Best Local Similarity 100.0%; Pred. No. 2.3e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2      GGAGCCCGCAGCAATGC 17
|||||
Db      635      GGAGCCCGCAGCAATGC 620

RESULT 5
LOCUS      BG076347
DEFINITION      H3158F07-3 NIA Mouse 15K cDNA Clone Set Mus musculus cDNA clone
H3158F07 3', mRNA sequence.
ACCESSION      BG076347

```

```

VERSION      BG076347.1 GI:12558916
KEYWORDS      EST.
SOURCE      house mouse.
ORGANISM      Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 642)
/organism="Mus musculus"
/db_xref="niaEST:H3158F07-3"
/db_xref="taxon:10090"
/clone_lib="NIA Mouse 15K cDNA Clone Set"
/dev_stage="Clones arrayed from a variety of cDNA
libraries"
/lab_host="DH10B"
/notes="Vector: pSPORT1; Site_1: SalI; Site_2: NotI; This
clone is among a rearrayed set of 15,247 clones from 11
embryo cDNA libraries (including preimplantation stage
embryos from unfertilized egg to blastocyst, embryonic
part of E7.5 embryos, extraembryonic part of E7.5 embryos
, and E12.5 female mesonephros/gonad) and one newborn
ovary cDNA library. Average insert size 1.5 kb. All
source libraries are cloned unidirectionally with Oligo(dT
)-NotI primers. References include: (1) Genome-wide
expression profiling of mid-gestation placenta and embryo
using a 15,000 mouse developmental cDNA microarray, 2000,
Proc. Natl. Acad. Sci. U S A, 97: 9127-9132; (2)
Large-scale cDNA analysis reveals phased gene expression
patterns during preimplantation mouse development, 2000,
Development, 127: 1737-1749; (3) Genome-wide mapping of
unselected transcripts from extraembryonic tissue of
7.5-day mouse embryos reveals enrichment in the t-complex
and under-representation on the X chromosome, 1998, Hum
Mol Genet 7: 1967-1978."

BASE COUNT      166 a      135 c      181 g      160 t
ORIGIN
Query Match      94.1%; Score 16; DB 12; Length 642;
Best Local Similarity 100.0%; Pred. No. 2.3e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1      GGGAGCCCGCAGCAATG 16
|||||
Db      280      GGGAGCCCGCAGCAATG 295

RESULT 6
LOCUS      BG704650/c
DEFINITION      602688222P1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:4820860 5',
mRNA sequence.
ACCESSION      BG704650
VERSION      BG704650.1 GI:13978201

```

```

KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
EST.
human.
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 774)
NIH-MGC http://mgc.ncl.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs@mail.nih.gov
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
cDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiraki
Toshiyuki and Piero Carninci (RIKEN)
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: L1AM10726 row: k column: 05
High quality sequence stop: 700.
Location/Qualifiers
1..774
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:4820860"
/clone_lib="NIH_MGC_95"
/tissue_type="hippocampus"
/lab_host="DH10B"
/notes="Organ: brain; Vector: pBluescriptR (modified
pBluescript KS+); Site_1: BamHI; Site_2: SalI-XhoI (gtcag
); Oligo-dT primed using primer 5'-TTTTTTTTTTTNN-3',
size-selected for average insert size 2.5 kb and
normalized to 50x. This is a primary library enriched
for full-length clones and constructed using the
Cap-trapper method (Carninci, in preparation). Library
constructed by M. Brownstein (NIH/NHGRI, National
Institutes of Health). Note: this is a NIH_MGC Library."
BASE COUNT 171 a 216 c 233 g 154 t
ORIGIN
Query Match 94.1%; Score 16; DB 12; Length 774;
Best Local Similarity 100.0%; Pred. No. 2.4e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGAGCCCCCAGCAATGC 17
|||||
Db 54 GGAGCCCCCAGCAATGC 39

RESULT 7
HM468789/c
LOCUS
DEFINITION
976 bp mRNA linear EST 05-FEB-2002
AGENCOURT_6481239 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:5541510
5', mRNA sequence.
ACCESSION
BM468789
VERSION
BM468789.1 GI:18517831
KEYWORDS
EST.
SOURCE
human.
ORGANISM
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 976)
NIH-MGC http://mgc.ncl.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be

```

```

found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: L1AM1239 row: f column: 07
High quality sequence stop: 642.
Location/Qualifiers
1..976
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:5541510"
/clone_lib="NIH_MGC_88"
/tissue_type="duodenal adenocarcinoma, cell line"
/lab_host="DH10B (phage-resistant)"
/notes="Organ: small intestine; Vector: pCMV-SPORT6;
Site_1: NotI; Site_2: SalI; Cloned unidirectionally;
oligo-dT primed. Average insert size 1.767 kb. Library
enriched for full-length clones and constructed by Life
Technologies. Note: this is a NIH_MGC Library."
BASE COUNT 202 a 289 c 267 g 218 t
ORIGIN
Query Match 94.1%; Score 16; DB 13; Length 976;
Best Local Similarity 100.0%; Pred. No. 2.6e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGAGCCCCCAGCAATG 16
|||||
Db 705 GGGAGCCCCCAGCAATG 690

RESULT 8
AA852498
LOCUS
DEFINITION
300 bp mRNA linear EST 20-JUN-2002
NHTBCae14a07f1 Normal Human Trabecular Bone Cells Homo sapiens cDNA
clone NHTBCae14a07, mRNA sequence.
ACCESSION
AA852498
VERSION
AA852498.1 GI:2941091
KEYWORDS
EST.
SOURCE
human.
ORGANISM
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 300)
Jia, L.B., Young, M.F., Touchman, J.W., Bouffard, G.G., Robey
Beckstrom-Sternberg, S.M., Green, E.D., Powell, J.I., Yang, L.M., Robey
P.G., Hotchkiss, R.N. and Francomano, C.A.
SGAP: The Skeletal Genome Anatomy Project
Unpublished (1997)
Contact: Libin Jia
Medical Genetics Branch
National Human Genome Research Institute
10/10C101, 9000 Rockville Pike, Bethesda, MD 20892-1267, USA
Tel: 301-402-4877
Fax: 301-496-7157
Email: libin@helix.nih.gov
Seq primer: M13 Forward.
Location/Qualifiers
1..300
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="NHTBCae14a07"
/clone_lib="Normal Human Trabecular Bone Cells"
/sex="Female"
/tissue_type="Bone"
/cell_type="Trabecular Bone Cells"
/lab_host="SURE"
/notes="Organ: Hip; Vector: pBluescript; Site_1: EcoRI;
Library constructed by Dr. Marian Young and Dr. Pamela
Gehron Robey (NIDCR)"
BASE COUNT 64 a 102 c 99 g 34 t 1 others
ORIGIN
Query Match 90.6%; Score 15.4; DB 9; Length 300;
Best Local Similarity 94.1%; Pred. No. 3.5e+03;

```

Matches 16; Conservative 0; Mismatch 1; Indels 0; Gaps 0;

Qy 1 GGGAGCCCCAGCAATGC 17
 |||||
 Db 167 GGGAGCCCCAGCAACGC 183

RESULT 9
 AW067967/c
 LOCUS
 DEFINITION
 clone 22h11.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA
 clone NHTBC-cn22h11 random, mRNA sequence.
 ACCESSION
 AW067967
 VERSION
 AW067967.1 GI:6022965
 KEYWORDS
 EST.
 SOURCE
 human.
 ORGANISM
 Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE
 AUTHORS
 1 (bases 1 to 319)
 Jia,L.B., Young,M.F., Touchman,J.W., Bouffard,G.G.,
 Beckstrom-Sternberg,S.M., Green,B.D., Powell,J.I., Yang,L.M., Robey
 P.G., Hotchkiss,R.N. and Francomano,C.A.
 SGAP: The Skeletal Genome Anatomy Project
 Unpublished (1997)
 COMMENT
 Contact: Libin Jia
 Medical Genetics Branch
 National Human Genome Research Institute
 10/10C101, 9000 Rockville Pike, Bethesda, MD 20892-1267, USA
 Tel: 301-402-4877
 Fax: 301-496-7157
 Email: libin@helix.nih.gov
 DNA Sequencing and analyses by National Institutes of Health
 Intramural Sequencing Center (NISC).
 Plate: 22 row: h column: 11
 Seq primer: 21M13 forward primer (ABI).
 Location/Qualifiers
 1. 319

FEATURES
 source
 /organism="Homo sapiens"
 /db_xref="taxon:9606"
 /clone="NHTBC-cn22h11"
 /clone_lib="Normal Human Trabecular Bone Cells"
 /sex="Female"
 /tissue_type="Bone"
 /cell_type="Trabecular Bone Cells"
 /lab_host="SURE"
 /note="Organ: Hip; Vector: pBluescript; Site_1: EcoRI;
 Library constructed by Dr. Marian Young and Dr. Pamela
 Gehron-Robey (NIDCR)."
 41 a 96 c 112 g 70 t

BASE COUNT
 ORIGIN
 Query Match 90.6%; Score 15.4; DB 10; Length 319;
 Best Local Similarity 94.1%; Pred. No. 3.6e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GGGAGCCCCAGCAATGC 17
 |||||
 Db 178 GGGAGCCCCAGCAACGC 162

RESULT 10
 A1449767/c
 LOCUS
 DEFINITION
 mr69a08.x1 Stratagene mouse testis (#937308) Mus musculus cDNA
 clone IMAGE:602678 3', mRNA sequence.
 ACCESSION
 A1449767
 VERSION
 A1449767.1 GI:4292306
 KEYWORDS
 EST.
 SOURCE
 house mouse.
 ORGANISM
 Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.

REFERENCE
AUTHORS

1 (bases 1 to 320)
 Marra,M., Hillier,L., Kucaba,T., Martin,J., Beck,C., Wylie,T.,
 Underwood,K., Steptoe,M., Theising,B., Allen,M., Bowers,Y., Person
 B., Swaller,T., Gibbons,M., Pape,D., Harvey,N., Schurk,R., Ritter
 E., Kohn,S., Shin,T., Jackson,F., Cardenas,M., McCann,R.,
 Waterston,R. and Wilson,R.
 The WashU-NCI Mouse EST Project 1999
 Unpublished (1999)

TITLE
JOURNAL
COMMENT

Contact: Marra M/WashU-NCI Mouse EST Project 1999
 Washington University School of Medicine
 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
 Tel: 314 286 1800
 Fax: 314 286 1810
 Email: mouseest@wustl.edu
 This clone is available royalty-free through LNL; contact the
 IMAGE Consortium (info@image.llnl.gov) for further information.
 This clone was previously sequenced on the 5' end only, this new
 data is from the 3' end
 Possible reversed clone: polyT not found.

FEATURES
source

Location/Qualifiers
 1. 320
 /organism="Mus musculus"
 /strain="CD-1"
 /db_xref="taxon:10090"
 /clone="IMAGE:602678"
 /clone_lib="Stratagene mouse testis (#937308)"
 /sex="males"
 /tissue_type="testis"
 /dev_stage="10-12 week old"
 /lab_host="SOLR (kanamycin resistant)"
 /note="Organ: testis; Vector: pBluescript SK-; Site_1:
 EcoRI; Site_2: XhoI; Cloned unidirectionally. Primer:
 Oligo dT. Average insert size: 1.0 kb; Uni-ZAP XR Vector;
 -5' adaptor sequence: 5' GAATTCGGCAGCAG 3' -3' adaptor
 sequence: 5' CTCGAGTTTTTTTTTTT 3'"

BASE COUNT
ORIGIN

81 a 70 c 85 g 84 t
 Query Match 90.6%; Score 15.4; DB 9; Length 320;
 Best Local Similarity 94.1%; Pred. No. 3.6e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GGGAGCCCCAGCAATGC 17
 |||||
 Db 34 GGGAGCCCCAGCAATGC 18

RESULT 11
LOCUS

AA629118/c
 DEFINITION
 af57e02.s1 Soares total fetus.Nb2HF8.9w Homo sapiens cDNA clone
 IMAGE:1035770 3' similar to gb:M23102 HIGH AFFINITY NERVE GROWTH
 FACTOR RECEPTOR PRECURSOR (HUMAN);, mRNA sequence.

ACCESSION
 AA629118
 VERSION
 AA629118.1 GI:2541505
 KEYWORDS
 EST.
 SOURCE
 human.
 ORGANISM
 Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
AUTHORS

1 (bases 1 to 336)
 Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geiscl,G., Jost,S.,
 Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M., Martin
 J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F., Theising,B.,
 White,Y., Wylie,T., Waterston,R. and Wilson,R.
 WashU-NCI human EST Project
 Unpublished (1997)

TITLE
JOURNAL
COMMENT

Contact: Willson RK
 Washington University School of Medicine
 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
 Tel: 314 286 1800
 Fax: 314 286 1810
 Email: est@wustl.edu

This clone is available royalty-free through LBNL; contact the IMAGE Consortium (infoimage.lbnl.gov) for further information. Trace considered overall poor quality. Insert length: 710 Std Error: 0.00 Seq primer: -40ml3 fwd. ET from Amersham High quality sequence stop: 1. Location/Qualifiers

FEATURES
source

```
1. 336
/organism="Homo sapiens"
/db_xref="Laxon:9606"
/clone="IMAGE:1035770"
/clone_lib="Soares_total_telus_Nb2Hf8_9w"
/dev_stage="8-9 weeks"
/lab_host="DH10B"
/notes="vector: pT773D-Pac (Pharmacia) with a modified polylinker; Site_1: Not 1; Site_2: Eco RI; 1st strand cDNA was prepared from mRNA obtained from pooled 8-9 week (total) fetus material with a Not 1 - oligo(dT) primer [5' TGTTACCAATCTGAAGTGGGAGCGGCGCTTAATTTTTTTTGT 3']. Double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not 1 and cloned into the Not 1 and Eco RI sites of the modified pT73 vector. Library went through one round of normalization, and was constructed by Bento Soares and M. Fatima Bonaldo. "
```

BASE COUNT 64 a 95 c 98 g 79 t
ORIGIN

Query Match 90.6%; Score 15.4; DB 9; Length 336;
Best Local Similarity 94.1%; Pred. No. 3.6e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GGGAGCCCGACCAATGC 17
IIIIIIIIIIIIIIII

Db 301 GGGAGCCCGACCAATGC 285

RESULT 12
BH842232/c
LOCUS

DEFINITION 382 bp DNA linear GSS 13-JUN-2002
TC3-50P20.TP.TC3 Trypanosoma cruzi genomic clone TC3-50P20, DNA sequence.

ACCESSION BH842232 GI:21409447
VERSION
KEYWORDS
SOURCE
ORGANISM Trypanosoma cruzi
Trypanosoma cruzi
Eukaryota; Euklenozoa; Kinetoplastida; Trypanosomatidae;
Trypanosoma; Schizotrypanum.

REFERENCE 1 (bases 1 to 382)
Mylers,P.J., Aggarwal,G., Fazelinia,G., Mack,J., Marty,A., Munden,H., Nelson,S., Pentony,M., Rinta,J., Robertson,L., Seyler,A., Sisk,E., Stuart,K., Vogt,C., Worthey,E., El-Sayed,N.M., Ghedin,E. and Andersson,B.

TITLE Trypanosoma cruzi CL-Brener TC3 BAC-end sequencing
JOURNAL Unpublished (2001)
COMMENT Other_GSSs: TC3-50P20.TP.1 TC3-50P20.TV
Contact: Peter Myler
Seattle Biomedical Research Institute
4 Nickerson Street, Seattle, WA 98109, USA
Tel: 206 284 8846
Fax: 206 284 0313
Email: mylerp@sbri.org
Clones are derived from the Trypanosoma cruzi CL-Brener BAC library TC3. For clone availability, please contact Dr. Bjorn Andersson at Uppsala University (bjorn.andersson@genpat.uu.se).

FEATURES
source

Location/Qualifiers
1. .382
/organism="Trypanosoma cruzi"
/strain="CL Brener"
/db_xref="taxon:5693"
/clone="TC3-50P20"

/clone_lib="TC3"
/note="vector: pBelOBAC11; Site_1: Hin dIII; Constructed for Uppsala University by Marie-Christine Le Paslier in the Laboratory of Denis Le Paslier at the Centre d'Etude du Polymorphisme Humain (CEPH), Paris, France. Briefly, Trypanosoma cruzi CL-Brener agarose embedded DNA (obtained from Dr. Franco da Silveira) was partially digested with Hin dIII. High molecular weight fragments were ligated in pBelOBAC11 digested with Hin dIII. The average insert size is 100 kb. Total clone coverage: approx. 33 X the haploid genome."

BASE COUNT 88 a 112 c 81 g 101 t
ORIGIN

Query Match 90.6%; Score 15.4; DB 17; Length 382;
Best Local Similarity 94.1%; Pred. No. 3.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GGGAGCCCGACCAATGC 17
IIIIIIIIIIIIIIII

Db 172 GGGAGCCCGACCAATGC 156

RESULT 13
BH845093/c
LOCUS

DEFINITION 382 bp DNA linear GSS 13-JUN-2002
TC3-50P20.TP.1 TC3 Trypanosoma cruzi genomic clone TC3-50P20, DNA sequence.

ACCESSION BH845093
VERSION BH845093.1 GI:21415281
KEYWORDS
SOURCE
ORGANISM Trypanosoma cruzi
Trypanosoma cruzi
Eukaryota; Euklenozoa; Kinetoplastida; Trypanosomatidae;
Trypanosoma; Schizotrypanum.

REFERENCE 1 (bases 1 to 382)
Mylers,P.J., Aggarwal,G., Fazelinia,G., Mack,J., Marty,A., Munden,H., Nelson,S., Pentony,M., Rinta,J., Robertson,L., Seyler,A., Sisk,E., Stuart,K., Vogt,C., Worthey,E., El-Sayed,N.M., Ghedin,E. and Andersson,B.

TITLE Trypanosoma cruzi CL-Brener TC3 BAC-end sequencing
JOURNAL Unpublished (2001)
COMMENT Other_GSSs: TC3-50P20.TP.TC3-50P20.TV
Contact: Peter Myler
Seattle Biomedical Research Institute
4 Nickerson Street, Seattle, WA 98109, USA
Tel: 206 284 8846
Fax: 206 284 0313
Email: mylerp@sbri.org
Clones are derived from the Trypanosoma cruzi CL-Brener BAC library TC3. For clone availability, please contact Dr. Bjorn Andersson at Uppsala University (bjorn.andersson@genpat.uu.se).

FEATURES
source

Location/Qualifiers
1. .382
/organism="Trypanosoma cruzi"
/strain="CL Brener"
/db_xref="taxon:5693"
/clone="TC3-50P20"
/clone_lib="TC3"
/note="vector: pBelOBAC11; Site_1: Hin dIII; Constructed for Uppsala University by Marie-Christine Le Paslier in the Laboratory of Denis Le Paslier at the Centre d'Etude du Polymorphisme Humain (CEPH), Paris, France. Briefly, Trypanosoma cruzi CL-Brener agarose embedded DNA (obtained from Dr. Franco da Silveira) was partially digested with Hin dIII. High molecular weight fragments were ligated in pBelOBAC11 digested with Hin dIII. The average insert size is 100 kb. Total clone coverage: approx. 33 X the haploid genome."

BASE COUNT 88 a 112 c 81 g 101 t
ORIGIN

```

Query Match          90.6%; Score 15.4; DB 17; Length 382;
Best Local Similarity 94.1%; Pred. No. 3.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GGGAGCCCCCAGCAATGC 17
    |||||
DB 172 GGGAGCCCCCAGCAATGC 156

RESULT 14
BI005357/C
LOCUS          383 bp      mRNA      linear      EST 13-JUN-2001
DEFINITION    CMO-HN0206-090401-813-ell HN0206 Homo sapiens cDNA, mRNA sequence.
ACCESSION     BI005357
VERSION       BI005357.1 GI:14409431
KEYWORDS      EST.
SOURCE        human.
ORGANISM      Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 383)
Dias Neto,E., Garcia Correa,K., Verjovsky-Almeida,S., Briones,M.R.,
Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
Simpson,A.J.
Shotgun sequencing of the human transcriptome with ORF expressed
sequence tags
Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
20202663
Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
Brazil
Tel: +55-11-2704922
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICK Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=CM0-HN0206-
090401-813-ell&t3=2001-04-09&t4=1)
Seq primer: puc 18 forward
High quality sequence stop: 383.
Location/Qualifiers
1..383
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_lib="HN0206"
/dev_stage="Adult"
/note="Organ: head_normal; Vector: puc18; Site_1: SmaI;
Site_2: SmaI; A mini-library was made by cloning products
derived from ORESTES PCR (U.S. Letters Patent application
No. 196,716 - Ludwig Institute for Cancer Research)
profiles into the pUC 18 vector. Reverse transcription of
tissue mRNA and cDNA amplification were performed under
low stringency conditions."
BASE COUNT      74 a      89 g      123 t
ORIGIN
Query Match          90.6%; Score 15.4; DB 13; Length 383;
Best Local Similarity 94.1%; Pred. No. 3.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GGGAGCCCCCAGCAATGC 17
    |||||
DB 54 GGGAGCCCCCAGCAATGC 38

RESULT 15
BI005357/C
LOCUS          385 bp      DNA      linear      GSS 18-JUN-1998
DEFINITION    A-1054B4.TP CIT978SK Homo sapiens genomic clone A-1054B4, DNA
sequence.
ACCESSION     BI005357
VERSION       BI005357.1 GI:2121930
KEYWORDS      GSS.
SOURCE        human.
ORGANISM      Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 385)
Adams,M.D., Kelley,J.M., Rounsley,S.R. and Venter,J.C.
Use of a BAC end Sequence Database for Sequence-Ready Map Building
Unpublished (1997)
Other_GSSs: 1054B4.TV
Contact: Mark Adams
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 0200
Fax: 301 838 0208
Email: mdamas@tigr.org
Clones are available from Research Genetics (info@resgen.com). BAC
end search page:
http://www.tigr.org/tdb/hungen/bac_end_search/bac_end_search.html
Seq primer: SP6
Class: BAC ends.
Location/Qualifiers
1..385
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_lib="A-1054B4"
/clone_lib="CIT978SK"
/sex="Female"
/cell_type="Fibroblast"
/note="Vector: pBAC108L; Site_1: HindIII; Site_2: HindIII;
CalTech Human BAC Library A"
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Query Match          90.6%; Score 15.4; DB 17; Length 385;
Best Local Similarity 94.1%; Pred. No. 3.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

*QY 1 GGGAGCCCCCAGCAATGC 17
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DB 154 GGGAGCCCCCAGCAATTC 138

Search completed: January 21, 2003, 15:38:03
Job time : 1203.97 secs

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GenCore version 5.1.3
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OM nucleic - nucleic search, using sw model

Run on: January 21, 2003, 14:55:32 : Search time 30.6944 Seconds
(without alignments)
246.942 Million cell updates/sec

Title: US-09-853-688-35
Perfect score: 17
Sequence: 1 gggagccccagcaatgc 17

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 393868 seqs, 222934149 residues

Total number of hits satisfying chosen parameters: 787736

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA:*

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2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*

5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*

6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*

7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

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11: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*

12: /cgn2_6/ptodata/1/pubpna/US10_PUBCOMB.seq:*

13: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*

14: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Query | Score | Match | Length | DB | ID | Description |
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| 1 | 17 | 100.0 | 17 | 10 | US-09-853-688-35 | | Sequence 35, Appli |
| 2 | 17 | 100.0 | 3700 | 10 | US-09-853-688-5 | | Sequence 5, Appli |
| 3 | 15.4 | 90.6 | 468 | 10 | US-09-864-761-5528 | | Sequence 5528, Ap |
| 4 | 15.4 | 90.6 | 2820 | 10 | US-09-924-859A-4 | | Sequence 4, Appli |
| 5 | 15.4 | 90.6 | 5086 | 10 | US-09-880-107-3947 | | Sequence 3947, Ap |
| 6 | 15.4 | 90.6 | 5145 | 10 | US-09-925-299-206 | | Sequence 206, App |
| 7 | 15.4 | 90.6 | 5416 | 10 | US-09-954-456-786 | | Sequence 786, App |
| 8 | 15.4 | 90.6 | 5416 | 10 | US-09-880-107-2094 | | Sequence 2094, Ap |
| 9 | 15.4 | 90.6 | 5432 | 12 | US-10-044-090-22 | | Sequence 22, Appli |
| 10 | 15 | 88.2 | 1041 | 9 | US-09-738-626-3422 | | Sequence 3422, Ap |
| 11 | 15 | 88.2 | 1152 | 9 | US-09-738-626-3424 | | Sequence 3424, Ap |
| 12 | 15 | 88.2 | 1894 | 10 | US-09-126-945B-1 | | Sequence 1, Appli |
| 13 | 15 | 88.2 | 1884 | 10 | US-09-841-963A-1 | | Sequence 1, Appli |
| 14 | 15 | 88.2 | 1905 | 10 | US-09-866-356-2 | | Sequence 2, Appli |
| 15 | 14.4 | 84.7 | 266 | 10 | US-09-962-436-91 | | Sequence 91, Appli |
| 16 | 14.4 | 84.7 | 302 | 9 | US-10-015-219-718 | | Sequence 718, App |
| 17 | 14.4 | 84.7 | 302 | 10 | US-09-777-564-718 | | Sequence 718, App |
| 18 | 14.4 | 84.7 | 316 | 10 | US-09-998-598-1147 | | Sequence 1147, Ap |
| 19 | 14.4 | 84.7 | 698 | 10 | US-09-910-943-311 | | Sequence 311, App |

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| 20 | 14.4 | 84.7 | 1570 | 9 | US-09-798-051-4 | Sequence 4, Appli |
| 21 | 14.4 | 84.7 | 1720 | 9 | US-09-965-528-39 | Sequence 39, Appli |
| 22 | 14.4 | 84.7 | 1732 | 9 | US-10-063-547-81 | Sequence 81, Appli |
| 23 | 14.4 | 84.7 | 1732 | 9 | US-10-174-590-281 | Sequence 281, App |
| 24 | 14.4 | 84.7 | 1732 | 9 | US-10-176-758-281 | Sequence 281, App |
| 25 | 14.4 | 84.7 | 1732 | 12 | US-10-006-867-81 | Sequence 81, Appli |
| 26 | 14.4 | 84.7 | 1732 | 12 | US-10-052-586-281 | Sequence 281, App |
| 27 | 14.4 | 84.7 | 1839 | 9 | US-09-798-051-1 | Sequence 1, Appli |
| 28 | 14 | 82.4 | 1734 | 9 | US-10-103-511-3 | Sequence 3, Appli |
| 29 | 14 | 82.4 | 1734 | 10 | US-09-805-204-3 | Sequence 3, Appli |
| 30 | 14 | 82.4 | 4065 | 10 | US-09-808-571A-3 | Sequence 1, Appli |
| 31 | 14 | 82.4 | 4341 | 10 | US-09-808-571A-1 | Sequence 1, Appli |
| 32 | 14 | 82.4 | 9745 | 10 | US-09-764-869-2259 | Sequence 2259, Ap |
| 33 | 14 | 82.4 | 12149 | 10 | US-09-764-869-2258 | Sequence 2258, Ap |
| 34 | 14 | 82.4 | 29629 | 12 | US-10-135-689-3 | Sequence 7, Appli |
| 35 | 14 | 82.4 | 170834 | 10 | US-09-835-232-7 | Sequence 7, Appli |
| 36 | 13.8 | 81.2 | 293 | 10 | US-09-983-965-2249 | Sequence 2249, Ap |
| 37 | 13.8 | 81.2 | 337 | 10 | US-09-983-965-2463 | Sequence 2463, Ap |
| 38 | 13.8 | 81.2 | 349 | 10 | US-09-983-965-2493 | Sequence 2493, Ap |
| 39 | 13.8 | 81.2 | 362 | 10 | US-09-983-965-2530 | Sequence 2530, Ap |
| 40 | 13.8 | 81.2 | 365 | 9 | US-09-796-692-5576 | Sequence 5576, Ap |
| 41 | 13.8 | 81.2 | 379 | 10 | US-09-783-590-7717 | Sequence 7717, Ap |
| 42 | 13.8 | 81.2 | 384 | 9 | US-10-040-739-1302 | Sequence 1302, Ap |
| 43 | 13.8 | 81.2 | 390 | 10 | US-09-960-352-1031 | Sequence 3031, Ap |
| 44 | 13.8 | 81.2 | 398 | 10 | US-09-728-445-656 | Sequence 656, App |
| 45 | 13.8 | 81.2 | 479 | 9 | US-09-796-692-3578 | Sequence 3578, Ap |

ALIGNMENTS

RESULT 1

US-09-853-688-35

: Sequence 35, Application US/09853688

: Patent No. US20020081605A1

: GENERAL INFORMATION:

: APPLICANT: COOPER, DAVID N.

: APPLICANT: PROCTER, ANNIE M.

: APPLICANT: GREGORY, JOHN

: APPLICANT: MILLAR, DAVID S.

: TITLE OF INVENTION: METHOD FOR DETECTING GROWTH HORMONE VARIATIONS IN HUMANS, THE VARIATIONS AND THEIR USES

: FILE REFERENCE: WCM78

: CURRENT APPLICATION NUMBER: US/09/853,688

: CURRENT FILING DATE: 2001-05-14

: NUMBER OF SEQ ID NOS: 66

: SOFTWARE: PatentIn Ver. 2.1

: SEQ ID NO 35

: LENGTH: 17

: TYPE: DNA

: ORGANISM: Homo sapiens

US-09-853-688-35

Query Match 100.0%; Score 17; DB 10; Length 17;
Best Local Similarity 100.0%; Pred. No. 5.1;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 GGGAGCCCCAGCAATGC 17

Db 1 GGGAGCCCCAGCAATGC 17

RESULT 2

US-09-853-688-5

: Sequence 5, Application US/09853688

: Patent No. US20020081605A1

: GENERAL INFORMATION:

: APPLICANT: COOPER, DAVID N.

: APPLICANT: PROCTER, ANNIE M.

: APPLICANT: GREGORY, JOHN

: APPLICANT: MILLAR, DAVID S.

: TITLE OF INVENTION: METHOD FOR DETECTING GROWTH HORMONE VARIATIONS IN HUMANS, THE VARIATIONS AND THEIR USES

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; FILE REFERENCE: WCM78
; CURRENT APPLICATION NUMBER: US/09/853,688
; CURRENT FILING DATE: 2001-05-14
; NUMBER OF SEQ ID NOS: 66
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 3700
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-853-688-5

Query Match      100.0%; Score 17; DB 10; Length 3700;
Best Local Similarity 100.0%; Pred. No. 7.8;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GGGAGCCCCAGCAATGC 17
DB      86 GGGAGCCCCAGCAATGC 102

RESULT 3
US-09-864-761-5528
; Sequence 5528, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharron G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; APPLICANT: Chen, Wensheng
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
; FILE REFERENCE: Aeomica-X-1
; CURRENT APPLICATION NUMBER: US/09/864,761
; CURRENT FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/180,312
; PRIOR FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 09/632,366
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00662
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00661
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 60/234,687
; PRIOR FILING DATE: 2000-09-21
; PRIOR APPLICATION NUMBER: US 09/608,408
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: US 09/774,203
; PRIOR FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 49117
; SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
; SEQ ID NO 5528

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; LENGTH: 468
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: MAP TO AC005529.7
; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 1.9
; OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 2.1
; OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 1.7
; OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 1.6
; OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.6
; OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 2.1
; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 1.9
; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.5
US-09-864-761-5528

Query Match      90.6%; Score 15.4; DB 10; Length 468;
Best Local Similarity 94.1%; Pred. No. 43;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 GGGAGCCCCAGCAATGC 17
DB      416 GGGAGCCCCAGCAATGC 432

RESULT 4
US-09-924-859A-4
; Sequence 4, Application US/09924859A
; Patent No. US20020137113A1
; GENERAL INFORMATION:
; APPLICANT: Godowski, Paul J.
; APPLICANT: Mark, Melanie R.
; APPLICANT: Sadick, Michael D.
; APPLICANT: Shelton, David L.
; APPLICANT: Wong, Wai Lee Tan
; TITLE OF INVENTION: KINASE RECEPTOR ACTIVATION ASSAY
; FILE REFERENCE: P0854C1P2C1
; CURRENT APPLICATION NUMBER: US/09/924,859A
; CURRENT FILING DATE: 2001-08-08
; PRIOR APPLICATION NUMBER: US/09/417,381
; PRIOR FILING DATE: 1999-10-13
; NUMBER OF SEQ ID NOS: 11
; SEQ ID NO 4
; LENGTH: 2820
; TYPE: DNA
; ORGANISM: Homo Sapien
US-09-924-859A-4

Query Match      90.6%; Score 15.4; DB 10; Length 2820;
Best Local Similarity 94.1%; Pred. No. 50;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 GGGAGCCCCAGCAATGC 17
DB      2643 GGGAGCCCCAGCAATGC 2659

RESULT 5
US-09-880-107-3947/c
; Sequence 3947, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
; APPLICANT: Horne, Darci T.
; APPLICANT: Vockley, Joseph G.
; APPLICANT: Scherf, Uwe
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
; FILE REFERENCE: 44921-5028-WO
; CURRENT APPLICATION NUMBER: US/09/880,107
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: US 60/211,379
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: US 60/237,054
; PRIOR FILING DATE: 2000-10-02

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; NUMMR OF SEQ ID NOS: 3950
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3947
; LENGTH: 5086
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Genbank Accession No. US20020142981A1 Z74616
; NAME/KEY: unsure
; LOCATION: (1)..(5086)
; OTHER INFORMATION: n = a or c or g or t
US-09-880-107-3947

Query Match          90.6%; Score 15.4; DB 10; Length 5086;
Best Local Similarity 94.1%; Pred. No. 52;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GGGAGCCCCCAGCAATGC 17
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Db 1102 GGGAGCCCCCAGCAACGC 1086

RESULT 6
US-09-925-299-206/c
; Sequence 206, Application US/09925299
; Patent No. US20020055627A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA102
; CURRENT APPLICATION NUMBER: US/09/925,299
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05883
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 1556
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 206
; LENGTH: 5145
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)
; OTHER INFORMATION: n equals a,t,g, or c
; NAME/KEY: misc_feature
; LOCATION: (17)
; OTHER INFORMATION: n equals a,t,g, or c
; NAME/KEY: misc_feature
; LOCATION: (5126)
; OTHER INFORMATION: n equals a,t,g, or c
; NAME/KEY: misc_feature
; LOCATION: (5143)
; OTHER INFORMATION: n equals a,t,g, or c
US-09-925-299-206

Query Match          90.6%; Score 15.4; DB 10; Length 5145;
Best Local Similarity 94.1%; Pred. No. 52;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GGGAGCCCCCAGCAATGC 17
    |||||
Db 1105 GGGAGCCCCCAGCAACGC 1089

RESULT 7
US-09-954-456-786/c
; Sequence 786, Application US/09954456
; Patent No. US20020115057A1
; GENERAL INFORMATION:
; APPLICANT: Young, Paul
; TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using Cand
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; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-76
; CURRENT APPLICATION NUMBER: US/09/954,456
; PRIOR FILING DATE: 2001-09-18
; PRIOR APPLICATION NUMBER: US/60/233,617
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: US/60/234,052
; PRIOR FILING DATE: 2000-09-20
; PRIOR APPLICATION NUMBER: US/60/234,923
; PRIOR FILING DATE: 2000-09-25
; PRIOR APPLICATION NUMBER: US/60/235,134
; PRIOR FILING DATE: 2000-09-25
; PRIOR APPLICATION NUMBER: US/60/235,637
; PRIOR FILING DATE: 2000-09-26
; PRIOR APPLICATION NUMBER: US/60/235,638
; PRIOR FILING DATE: 2000-09-26
; PRIOR APPLICATION NUMBER: US/60/235,711
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: US/60/235,720
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: US/60/235,840
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: US/60/235,863
; NUMBER OF SEQ ID NOS: 2276
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 786
; LENGTH: 5416
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-954-456-786

Query Match          90.6%; Score 15.4; DB 10; Length 5416;
Best Local Similarity 94.1%; Pred. No. 52;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GGGAGCCCCCAGCAATGC 17
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Db 1432 GGGAGCCCCCAGCAACGC 1416

RESULT 8
US-09-880-107-2094/c
; Sequence 2094, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
; APPLICANT: Horne, Darci T.
; APPLICANT: Vockley, Joseph G.
; APPLICANT: Scherf, Jwe
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
; FILE REFERENCE: 44921-5028-WO
; CURRENT APPLICATION NUMBER: US/09/880,107
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: US 60/211,379
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: US 60/237,054
; PRIOR FILING DATE: 2000-10-02
; NUMBER OF SEQ ID NOS: 3950
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2094
; LENGTH: 5416
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Genbank Accession No. US20020142981A1 J03464
US-09-880-107-2094

Query Match          90.6%; Score 15.4; DB 10; Length 5416;
Best Local Similarity 94.1%; Pred. No. 52;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GGGAGCCCCCAGCAATGC 17
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DB 1412 GGGAGCCCCCAGCAATGC 1416
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RESULT 9
US-10-044-090-22/c
: Sequence 22, Application US/10044090
: Patent No. US20020137081A1
: GENERAL INFORMATION:
: APPLICANT: Olga Bandman
: TITLE OF INVENTION: GENES DIFFERENTIALLY EXPRESSED IN VASCULAR TISSUE ACTIVATION
: FILE REFERENCE: PA-0028 US
: CURRENT APPLICATION NUMBER: US/10/044,090
: CURRENT FILING DATE: 2002-01-09
: NUMBER OF SEQ ID NOS: 850
: SOFTWARE: PERL Program
: SEQ ID NO 22
: LENGTH: 5432
: TYPE: DNA
: ORGANISM: Homo sapiens
: NAME/KEY: misc.feature
: OTHER INFORMATION: Incyte ID No. US20020137081A1 1383093.13
US-10-044-090-22
Query Match 90.68; Score 15.4; DB 12; Length 5432;
Best Local Similarity 94.1%; Pred. No. 52; Indels 0; Gaps 0;
Matches 16; Conservative 0; Mismatches 0;

QY 1 GGGAGCCCCCAGCAATGC 17
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DB 1435 GGGAGCCCCCAGCAATGC 1419
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RESULT 10
US-09-738-626-3422
: Sequence 3422, Application US/09738626
: Patent No. US20020197605A1
: GENERAL INFORMATION:
: APPLICANT: NAKAGAWA, SATOSHI
: APPLICANT: ANDO, SEIKO
: APPLICANT: HAYASHI, MIKIRO
: APPLICANT: OCHIAI, KEIKO
: APPLICANT: YOKOI, HARUHIKO
: APPLICANT: TATEISHI, NAOKO
: APPLICANT: SENOH, AKIHIRO
: APPLICANT: IKEDA, MASATO
: APPLICANT: OZAKI, AKIO
: TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
: FILE REFERENCE: 249-125
: CURRENT APPLICATION NUMBER: US/09/738,626
: CURRENT FILING DATE: 2000-12-18
: PRIOR APPLICATION NUMBER: JP 99/377484
: PRIOR FILING DATE: 1999-12-16
: PRIOR APPLICATION NUMBER: JP 00/159162
: PRIOR FILING DATE: 2000-04-07
: PRIOR APPLICATION NUMBER: JP 00/280988
: PRIOR FILING DATE: 2000-08-03
: NUMBER OF SEQ ID NOS: 7059
: SOFTWARE: PatentIn ver. 3.0
: SEQ ID NO 3422
: LENGTH: 1041
: TYPE: DNA
: ORGANISM: Corynebacterium glutamicum
US-09-738-626-3422
Query Match 88.2%; Score 15; DB 9; Length 1041;
Best Local Similarity 100.0%; Pred. No. 74;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GAGCCCCCAGCAATGC 17
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DB 496 GAGCCCCCAGCAATGC 510
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RESULT 11
US-09-738-626-3424/c
: Sequence 3424, Application US/09738626
: Patent No. US20020197605A1
: GENERAL INFORMATION:
: APPLICANT: NAKAGAWA, SATOSHI
: APPLICANT: MIZOGUCHI, HIROSHI
: APPLICANT: ANDO, SEIKO
: APPLICANT: HAYASHI, MIKIRO
: APPLICANT: OCHIAI, KEIKO
: APPLICANT: YOKOI, HARUHIKO
: APPLICANT: TATEISHI, NAOKO
: APPLICANT: SENOH, AKIHIRO
: APPLICANT: IKEDA, MASATO
: APPLICANT: OZAKI, AKIO
: TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
: FILE REFERENCE: 249-125
: CURRENT APPLICATION NUMBER: US/09/738,626
: CURRENT FILING DATE: 2000-12-18
: PRIOR APPLICATION NUMBER: JP 99/377484
: PRIOR FILING DATE: 1999-12-16
: PRIOR APPLICATION NUMBER: JP 00/159162
: PRIOR FILING DATE: 2000-04-07
: PRIOR APPLICATION NUMBER: JP 00/280988
: PRIOR FILING DATE: 2000-08-03
: NUMBER OF SEQ ID NOS: 7059
: SOFTWARE: PatentIn ver. 3.0
: SEQ ID NO 3424
: LENGTH: 1152
: TYPE: DNA
: ORGANISM: Corynebacterium glutamicum
US-09-738-626-3424
Query Match 88.2%; Score 15; DB 9; Length 1152;
Best Local Similarity 100.0%; Pred. No. 74;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GAGCCCCCAGCAATGC 17
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DB 858 GAGCCCCCAGCAATGC 844
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RESULT 12
US-09-126-945B-1
: Sequence 1, Application US/09126945B
: Patent No. US20010010934A1
: GENERAL INFORMATION:
: APPLICANT: Libermann, Towia A.
: APPLICANT: Oeltgen, Joerg P.
: APPLICANT: Kunsch, Charles A.
: APPLICANT: Endress, Gregory A.
: APPLICANT: Rosen, Craig A.
: TITLE OF INVENTION: Prostate Derived Bts Factor
: FILE REFERENCE: 1486.1090000
: CURRENT APPLICATION NUMBER: US/09/126,945B
: CURRENT FILING DATE: 1998-07-31
: NUMBER OF SEQ ID NOS: 15
: SOFTWARE: PatentIn ver. 2.0
: SEQ ID NO 1
: LENGTH: 1894
: TYPE: DNA
: ORGANISM: Homo sapiens
US-09-126-945B-1
Query Match 88.2%; Score 15; DB 10; Length 1894;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGAGCCCCCAGCAATGC 16
|||||
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```

100 864 GGAGCCCCAGCAATG 878

RESULT 13
US-09-841-963A-1
: Sequence 1, Application US/09841963A
: Patent No. US20020081601A1
: GENERAL INFORMATION:
: APPLICANT: Watson, Dennis K.
: APPLICANT: Papas, Takis S. (Deceased)
: APPLICANT: Papas, Tula C. (Legal Representative)
: TITLE OF INVENTION: Methods and compositions for the diagnosis and treatment of cancer
: TITLE OF INVENTION: based on transcription factor ETS2
: FILE REFERENCE: 10545-015-999
: CURRENT APPLICATION NUMBER: US/09/841,963A
: CURRENT FILING DATE: 2001-04-25
: PRIOR APPLICATION NUMBER: PCT/US99/27805
: PRIOR FILING DATE: 1999-11-23
: PRIOR APPLICATION NUMBER: 06/109,850
: PRIOR FILING DATE: 1998-11-25
: NUMBER OF SEQ ID NOS: 6
: SOFTWARE: PatentIn version 3.0
: SEQ ID NO 1
: LENGTH: 1894
: TYPE: DNA
: ORGANISM: Homo sapiens
: FEATURE:
: NAME/KEY: CDS
: LOCATION: (416)..(1423)
US-09-841-963A-1

Query Match      88.2%; Score 15; DB 10; Length 1894;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGAGCCCCAGCAATG 16
Db 864 GGAGCCCCAGCAATG 878

RESULT 14
US-09-866-356-2
: Sequence 2, Application US/09866356
: Patent No. US20020098543A1
: GENERAL INFORMATION:
: APPLICANT: Bandman, Olga
: APPLICANT: Corley, Neil C.
: APPLICANT: Guegler, Karl J.
: APPLICANT: Lal, Preeti
: TITLE OF INVENTION: PROSTATE-ASSOCIATED ETS PROTEIN
: NUMBER OF SEQUENCES: 4
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Incyte Pharmaceuticals, Inc.
: STREET: 3174 Porter Dr.
: CITY: Palo Alto
: STATE: CA
: COUNTRY: USA
: ZIP: 94304
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Diskette
: COMPUTER: IBM Compatible
: OPERATING SYSTEM: DOS
: SOFTWARE: FastSeq for Windows Version 2.0
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/09/866,356
: FILING DATE: 29-May-2001
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 09/055,113
: FILING DATE: 1998-04-03
: ATTORNEY/AGENT INFORMATION:
: NAME: Billings, Lucy J.
: REGISTRATION NUMBER: 36,749
: REFERENCE/DOCKET NUMBER: PP-0501 US

: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 650-855-0555
: TELEFAX: 650-845-4166
: TELEX: <Unknown>
: INFORMATION FOR SEQ ID NO: 2:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 1905 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: IMMEDIATE SOURCE:
: LIBRARY: PROSTUT12
: CLONE: 1813005
: SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-866-356-2

Query Match      88.2%; Score 15; DB 10; Length 1905;
Best Local Similarity 100.0%; Pred. No. 77;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGAGCCCCAGCAATG 16
Db 878 GGAGCCCCAGCAATG 892

RESULT 15
US-09-962-436-91
: Sequence 91, Application US/09962436
: Patent No. US20020081301A1
: GENERAL INFORMATION:
: APPLICANT: Soppet, Daniel
: TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using S
: FILE REFERENCE: 689290-75
: CURRENT APPLICATION NUMBER: US/09/962,436
: CURRENT FILING DATE: 2001-09-25
: PRIOR APPLICATION NUMBER: US/60/235,082
: PRIOR FILING DATE: 2000-09-25
: PRIOR APPLICATION NUMBER: US/60/234,924
: PRIOR FILING DATE: 2000-09-25
: NUMBER OF SEQ ID NOS: 568
: SOFTWARE: PatentIn version 3.0
: SEQ ID NO 91
: LENGTH: 266
: TYPE: DNA
: ORGANISM: Homo sapiens
: FEATURE:
: NAME/KEY: misc_feature
: OTHER INFORMATION: n=a,t,g or c
US-09-962-436-91

Query Match      84.7%; Score 14.4; DB 10; Length 266;
Best Local Similarity 93.8%; Pred. No. 1,3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 GGAGCCCCAGCAATGC 17
Db 170 GGAGCTCCAGCAATGC 185

Search completed: January 21, 2003, 16:29:15
Job time : 30.6944 secs
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GenCore version 5.1.3
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CM nucleic - nucleic search, using sw model

Run on: January 21, 2003, 15:09:37 : Search time 29.2778 seconds
(without alignments)
178.070 Million cell updates/sec

Title: us-09-853-688-35

Perfect score: 17
Sequence: 1 gggagcccgcaatgc 17

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 441362 seqs, 153338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
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4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Prod. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match % | Length | DB ID | Description |
|------------|-------|---------------|--------|-------|--------------------------------------|
| 1 | 15.4 | 90.6 | 2820 | 1 | US-08-286-305A-4 Sequence 4, Appli |
| 2 | 15.4 | 90.6 | 2820 | 2 | US-08-441-104A-4 Sequence 4, Appli |
| 3 | 15.4 | 90.6 | 2820 | 2 | US-08-440-816A-4 Sequence 4, Appli |
| 4 | 15.4 | 90.6 | 2820 | 4 | US-09-417-381A-4 Sequence 4, Appli |
| 5 | 15.4 | 90.6 | 38682 | 4 | US-08-943-731-2 Sequence 2, Appli |
| 6 | 15 | 88.2 | 1905 | 4 | US-09-055-113-2 Sequence 2, Appli |
| 7 | 15 | 88.2 | 1929 | 2 | US-09-016-000-10 Sequence 10, Appli |
| 8 | 14.4 | 84.7 | 23 | 2 | US-08-468-551-9 Sequence 9, Appli |
| 9 | 14.4 | 84.7 | 104 | 3 | US-08-717-294-104 Sequence 104, App |
| 10 | 14.4 | 84.7 | 4451 | 3 | US-08-717-294-42 Sequence 42, Appli |
| 11 | 14.4 | 84.7 | 9179 | 4 | US-09-453-702B-162 Sequence 162, App |
| 12 | 14.4 | 84.7 | 12537 | 2 | US-08-611-280-4 Sequence 4, Appli |
| 13 | 14.4 | 84.7 | 12537 | 4 | US-09-195-940-4 Sequence 4, Appli |
| 14 | 14.4 | 84.7 | 12537 | 4 | US-09-562-466-4 Sequence 4, Appli |
| 15 | 14 | 82.4 | 1209 | 4 | US-08-822-774-18 Sequence 18, Appli |
| 16 | 14 | 82.4 | 1209 | 4 | US-09-632-711-18 Sequence 18, Appli |
| 17 | 14 | 82.4 | 1209 | 4 | US-09-632-703B-18 Sequence 18, Appli |
| 18 | 14 | 82.4 | 1209 | 4 | US-09-632-703B-18 Sequence 18, Appli |
| 19 | 14 | 82.4 | 7379 | 4 | US-09-341-587-5 Sequence 5, Appli |
| 20 | 14 | 82.4 | 29629 | 4 | US-09-729-995-3 Sequence 3, Appli |
| 21 | 13.8 | 81.2 | 766 | 4 | US-09-105-839D-1 Sequence 1, Appli |
| 22 | 13.8 | 81.2 | 2062 | 1 | US-08-050-319B-24 Sequence 24, Appli |
| 23 | 13.8 | 81.2 | 2062 | 2 | US-08-465-982-24 Sequence 24, Appli |
| 24 | 13.8 | 81.2 | 2081 | 2 | US-09-096-982-7 Sequence 7, Appli |
| 25 | 13.8 | 81.2 | 2081 | 2 | US-08-653-650A-7 Sequence 1, Appli |
| 26 | 13.8 | 81.2 | 2161 | 3 | US-09-106-038A-1 Sequence 3, Appli |
| 27 | 13.8 | 81.2 | 2161 | 4 | US-09-505-250-3 Sequence 3, Appli |

28 13.8 81.2 2175 1 US-08-321-668-1 Sequence 1, Appli
29 13.8 81.2 2175 1 US-08-837-941-1 Sequence 1, Appli
30 13.8 81.2 2175 1 US-08-126-016-1 Sequence 1, Appli
31 13.8 81.2 2175 4 US-08-054-970-1 Sequence 1, Appli
32 13.8 81.2 2230 4 US-09-189-527-12 Sequence 12, Appli
33 13.8 81.2 2834 4 US-09-305-384-6 Sequence 6, Appli
34 13.8 81.2 3196 2 US-09-096-982-4 Sequence 4, Appli
35 13.8 81.2 3196 2 US-08-653-650A-4 Sequence 4, Appli
36 13.8 81.2 6235 4 US-09-305-384-5 Sequence 5, Appli
37 13.8 81.2 6679 4 US-09-305-384-1 Sequence 1, Appli
38 13.4 78.8 189 1 US-08-473-981A-1 Sequence 1, Appli
39 13.4 78.8 189 2 US-08-474-087-1 Sequence 1, Appli
40 13.4 78.8 680 4 US-08-943-731-92 Sequence 92, Appli
41 13.4 78.8 777 4 US-08-998-416-247 Sequence 247, App
42 13.4 78.8 1491 1 US-09-662-249A-3 Sequence 3, Appli
43 13.4 78.8 1781 1 US-08-314-615-2 Sequence 2, Appli
44 13.4 78.8 1781 1 US-08-314-362-2 Sequence 2, Appli
45 13.4 78.8 1781 1 US-08-433-010-2 Sequence 2, Appli

ALIGNMENTS

RESULT 1
US-08-286-305A-4
: Sequence 4, Application US/08286305A
: Patent No. 5766863
: GENERAL INFORMATION:
: APPLICANT: Godowski, Paul J.
: APPLICANT: Mark, Melanie R.
: APPLICANT: Sadick, Michael D.
: APPLICANT: Shelton, David L.
: APPLICANT: Wong, Wai Lee Tan
: TITLE OF INVENTION: KINASE RECEPTOR ACTIVATION ASSAY
: NUMBER OF SEQUENCES: 11
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Genentech, Inc.
: STREET: 460 Point San Bruno Blvd
: CITY: South San Francisco
: STATE: California
: COUNTRY: USA
: ZIP: 94080

COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/286.305A
FILING DATE: 05-AUG-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/170558
FILING DATE: 20-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/157563
FILING DATE: 23-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: Lee, Wendy M.
REGISTRATION NUMBER: 00.000
REFERENCE/DOCKET NUMBER: 854C1P1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-1994
TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 2820 bases
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
US-08-286-305A-4

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Query Match          90.6%; Score 15.4; DB 1; Length 2820;
Best Local Similarity 94.1%; Pred. No. 40;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GGGAGCCCCAGCAATGC 17
    |||||
Db 2643 GGGAGCCCCAGCAACGC 2659

RESULT 2
US-08-441-104A-4
: Sequence 4, Application US/08441104A
: Patent No. 5891650
: GENERAL INFORMATION:
: APPLICANT: Godowski, Paul J.
: APPLICANT: Mark, Melanie R.
: APPLICANT: Sadick, Michael D.
: APPLICANT: Shelton, David L.
: APPLICANT: Wong, Wai Lee Tan
: TITLE OF INVENTION: KINASE RECEPTOR ACTIVATION ASSAY
: NUMBER OF SEQUENCES: 11
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Genentech, Inc.
: STREET: 460 Point San Bruno Blvd
: CITY: South San Francisco
: STATE: California
: COUNTRY: USA
: ZIP: 94080
: COMPUTER READABLE FORM:
: MEDIUM TYPE: 3.5 inch, 720 kb floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: patin (Genentech)
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/441,104A
: FILING DATE: 15-MAY-1995
: CLASSIFICATION: 435
: PRIOR APPLICATION NUMBER: 08/286305
: FILING DATE: 05-AUG-1994
: APPLICATION NUMBER: 08/170558
: FILING DATE: 20-DEC-1993
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 08/157563
: FILING DATE: 23-NOV-1993
: ATTORNEY/AGENT INFORMATION:
: NAME: Lee, Wendy M.
: REGISTRATION NUMBER: 00,000
: REFERENCE/DOCKET NUMBER: 854C1P1C2
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 415/225-1994
: TELEFAX: 415/952-9881
: TELEX: 910/371-7168
: INFORMATION FOR SEQ ID NO: 4:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 2820 bases
: TYPE: nucleic acid
: STRANDEDNESS: double
: TOPOLOGY: linear
US-08-441-104A-4

Query Match          90.6%; Score 15.4; DB 2; Length 2820;
Best Local Similarity 94.1%; Pred. No. 40;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GGGAGCCCCAGCAATGC 17
    |||||
Db 2643 GGGAGCCCCAGCAACGC 2659

RESULT 3
US-08-440-816A-4
: Sequence 4, Application US/09417381A
: Patent No. 6287784
: GENERAL INFORMATION:
: APPLICANT: Godowski, Paul J.
: APPLICANT: Mark, Melanie R.
: APPLICANT: Sadick, Michael D.
: APPLICANT: Shelton, David L.
: APPLICANT: Wong, Wai Lee Tan
: TITLE OF INVENTION: KINASE RECEPTOR ACTIVATION ASSAY
: FILE REFERENCE: P0854C1P2C1
: CURRENT APPLICATION NUMBER: US/09/417,381A
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; CURRENT FILING DATE: 1999-10-13
; NUMBER OF SEQ ID NOS: 11
; SEQ ID NO 4
; LENGTH: 2820
; TYPE: DNA
; ORGANISM: Homo Sapien
; US-09-417-381A-4

Query Match 90.6%; Score 15.4; DB 4; Length 2820;
Best Local Similarity 94.1%; Pred. No. 40;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GGGAGCCCCAGCAATGC 17
|||||
DB 2643 GGGAGCCCCAGCAACGC 2659

RESULT 5
US-08-943-731-2/c
; Sequence 2, Application US/08943731
; Patent No. 6265157
; GENERAL INFORMATION:
; APPLICANT: PROCKOP, DARWIN J.
; APPLICANT: SPOTILA, LORETTA D.
; APPLICANT: DELTAS, CONSTANTINOS D.
; APPLICANT: SEREDA, LARISSA W.
; APPLICANT: LARSON, ANDREA W.
; APPLICANT: PACK, MICHAEL
; APPLICANT: COLIGE, ALAIN
; APPLICANT: EARLY, JAMES
; APPLICANT: KORKKO, JARMO
; APPLICANT: ALA-KORKKO, LEENA, et al.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DETECTING
; TITLE OF INVENTION: ALTERED TYPE I OR TYPE IX COLLAGEN GENE SEQUENCES
; NUMBER OF SEQUENCES: 666
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
; STREET: ONE COMMERCE SQUARE, 2005 MARKET STREET, 22ND
; STREET: FLR.
; CITY: PHILADELPHIA
; STATE: PA
; COUNTRY: USA
; ZIP: 19103-7086
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/943,731
; FILING DATE: 03-OCT-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/212,322
; FILING DATE: 14-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/803,628
; FILING DATE: 03-DEC-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: DOYLE LEARY Ph.D., KATHRYN
; REGISTRATION NUMBER: 36,317
; REFERENCE/DOCKET NUMBER: 9598-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-965-1284
; TELEFAX: 215-567-2991
; TELEX: 831-494
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3862 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)

US-08-943-731-2
Query Match 90.6%; Score 15.4; DB 4; Length 38682;
Best Local Similarity 94.1%; Pred. No. 48;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 GGGAGCCCCAGCAATGC 17
|||||
DB 17119 GGGAGCCCCAGCAACGC 17103
RESULT 6
US-09-055-113-2
; Sequence 2, Application US/09055113
; Patent No. 6265565
; GENERAL INFORMATION:
; APPLICANT: Bandman, Olga
; APPLICANT: Corley, Neil C.
; APPLICANT: Guegler, Karl J.
; APPLICANT: Lal, Preeti
; TITLE OF INVENTION: PROSTATE-ASSOCIATED ETS PROTEIN
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3174 Porter Dr.
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/055,113
; FILING DATE: Filed Herewith
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Billings, Lucy J.
; REGISTRATION NUMBER: 36,749
; REFERENCE/DOCKET NUMBER: PF-0501 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-855-0555
; TELEFAX: 650-845-4166
; TELEX:
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1905 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: PROSTUT12
; CLONE: 1813005
; US-09-055-113-2

Query Match 88.2%; Score 15; DB 4; Length 1905;
Best Local Similarity 100.0%; Pred. No. 62;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 GGAGCCCCAGCAATG 16
|||||
DB 878 GGAGCCCCAGCAATG 892

RESULT 7
US-09-016-000-10/c
; Sequence 10, Application US/09016000
; Patent No. 5962232
; GENERAL INFORMATION:

APPLICANT: Hillman, Jennifer L.
APPLICANT: Lal, Preeti
APPLICANT: Bandman, Olga
APPLICANT: Akerblom, Ingrid E.
APPLICANT: Shah, Purvi
APPLICANT: Corley, Neil C.
APPLICANT: Guegler, Karl G.
TITLE OF INVENTION: PROTEIN KINASE MOLECULES
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94304

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/016,000
FILING DATE: HEREWITH
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0465 US
TELEPHONE: 650-855-0555
TELEFAX: 650-845-4166
TELEX:
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 1929 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: MMLRDT01
CLONE: 472480
US-09-016-000-10

Query Match 88.28; Score 15; nb 2; Length 1929;
Best Local Similarity 100.0%; Pred. No. 62;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2 GGAGCCCCAGCAATG 16
Db 40 GGAGCCCCAGCAATG 26

RESULT 8
US-08-468-551-9
Sequence 9, Application US/08468551
Patent No. 5874212
GENERAL INFORMATION:
APPLICANT: Prokop, Darwin J.
APPLICANT: Rock, Matthew J.
TITLE OF INVENTION: DETECTION OF SINGLE BASE MUTATIONS AND
OTHER VARIATIONS IN DOUBLE STRANDED DNA BY
TITLE OF INVENTION: CONFORMATION-SENSITIVE CELL ELECTROPHORESIS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: ONE COMMERCE SQUARE, 2005 MARKET STREET, 22ND
FLOOR
CITY: PHILADELPHIA

STATE: PENNSYLVANIA
COUNTRY: UNITED STATES
ZIP: 19103-7086
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,551
FILING DATE: 06-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Doyle Leary Ph.D., Kathryn
REGISTRATION NUMBER: 36,317
REFERENCE/DOCKET NUMBER: 9855-501
TELEPHONE: 215-965-1284
TELEFAX: 215-567-2991
TELEX: 831-494
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 23 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-468-551-9

Query Match 84.7%; Score 14.4; DB 2; Length 23;
Best Local Similarity 93.8%; Pred. No. 92;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2 GGAGCCCCAGCAATGC 17
Db 8 GGAGCCCCAGCAATGC 23

RESULT 9
US-08-717-294-104/C
Sequence 104, Application US/08717294
Patent No. 6114148
GENERAL INFORMATION:
APPLICANT: SEED, BRIAN
APPLICANT: HAAS, JURGEN
TITLE OF INVENTION: HIGH LEVEL EXPRESSION OF
TITLE OF INVENTION: PROTEINS
NUMBER OF SEQUENCES: 110
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/717,294
FILING DATE: 20-SEP-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/345001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200

TELEFAX: 617-428-7045
TELEX:
INFORMATION FOR SEQ ID NO: 104:
SEQUENCE CHARACTERISTICS:
LENGTH: 104 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: Other
US-08-717-294-104

Query Match 84.7%; Score 14.4; DB 3; Length 104;
Best Local Similarity 93.8%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 GGAGCCCCAGCAATGC 17
|||||
Db 98 GGAGCCCCAGCAAGC 83

RESULT 10

US-08-717-294-42
Sequence 42, Application US/08717294
Patent No. 6114148
GENERAL INFORMATION:
APPLICANT: SEED, BRIAN
APPLICANT: HAAS, JURGEN
TITLE OF INVENTION: HIGH LEVEL EXPRESSION OF
TITLE OF INVENTION: PROTEINS
NUMBER OF SEQUENCES: 110
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/717,294
FILING DATE: 20-SEP-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/345001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:
INFORMATION FOR SEQ ID NO: 42:
SEQUENCE CHARACTERISTICS:
LENGTH: 4451 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
US-08-717-294-42

Query Match 84.7%; Score 14.4; DB 3; Length 4451;
Best Local Similarity 93.8%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 GGAGCCCCAGCAATGC 17
|||||
4051 GGAGCCCCAGCAAGC 4066

RESULT 11

US-09-453-702B-162
Sequence 162, Application US/09453702B
Patent No. 6365723
GENERAL INFORMATION:
APPLICANT: Blattner, Frederick R.
Burland, Valerie
Perna, Nicole T.
Plunkett, Guy
Welch, Rod
TITLE OF INVENTION: No. 6365723el Sequences of E. coli O157
NUMBER OF SEQUENCES: 265
CORRESPONDENCE ADDRESS:
ADDRESSEE: Quarles & Brady
STREET: 1 South Pinckney Street
CITY: Madison
STATE: WI
COUNTRY: US
ZIP: 53701-2113
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch. 1.44Mb storage
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 8.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/453,702B
FILING DATE: 03-Dec-1999
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/110,955
FILING DATE: 04-DEC-1998
ATTORNEY/AGENT INFORMATION:
NAME: Seay, Nicholas J.
REGISTRATION NUMBER: 27386
REFERENCE/DOCKET NUMBER: 960296.95017
TELECOMMUNICATION INFORMATION:
TELEPHONE: (608) 251-5000
TELEFAX: (608) 251-9166
INFORMATION FOR SEQ ID NO: 162:
SEQUENCE CHARACTERISTICS:
LENGTH: 9179
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 162:
US-09-453-702B-162

Query Match 84.7%; Score 14.4; DB 4; Length 9179;
Best Local Similarity 93.8%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 GGAGCCCCAGCAATGC 17
|||||
Db 2750 GCAGCCCCAGCAATGC 2765

RESULT 12

US-08-611-280-4/c
Sequence 4, Application US/08611280
Patent No. 5891666
GENERAL INFORMATION:
APPLICANT: Matsuyama, Toshifumi
APPLICANT: Grossman, Alex
TITLE OF INVENTION: NOVEL GENES ENCODING LSIRF POLYPEPTIDES
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Amgen Canada Inc.
STREET: 6733 Mississauga Road, Suite 303
CITY: Mississauga

```
; STATE: Ontario
; COUNTRY: Canada
; ZIP: L5N 6J8
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/611,280
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Oleski, Nancy A.
; REGISTRATION NUMBER: 34,688
; REFERENCE/DOCKET NUMBER: A-338A
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12537 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-611-280-4

Query Match      84.7%; Score 14.4; DB 2; Length 12537;
Best Local Similarity 93.8%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2 GGAGCCCCCAGCAATGC 17
Db 7199 GGAGCCCCCAGCAATGC 7184

RESULT 14
US-09-562-466-4/c
; Sequence 4, Application US/09562466
; Patent No. 6169202
; GENERAL INFORMATION:
; APPLICANT: Matsuyama, Toshifumi
; Grossman, Alex
; Richardson, Christopher D.
; TITLE OF INVENTION: NOVEL GENES ENCODING LSIRF POLYPEPTIDES
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Amgen Canada Inc.
; STREET: 6733 Mississauga Road, Suite 303
; CITY: Mississauga
; STATE: Ontario
; COUNTRY: Canada
; ZIP: L5N 6J8
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/562,466
; FILING DATE: 01-May-2000
; CLASSIFICATION: <unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/195,940
; FILING DATE: <unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Oleski, Nancy A.
; REGISTRATION NUMBER: 34,688
; REFERENCE/DOCKET NUMBER: A-338A
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12537 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-562-466-4

Query Match      84.7%; Score 14.4; DB 4; Length 12537;
Best Local Similarity 93.8%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2 GGAGCCCCCAGCAATGC 17
Db 7199 GGAGCCCCCAGCAATGC 7184

RESULT 15
US-08-822-774-18
; Sequence 18, Application US/08822774
; Patent No. 6183997
; GENERAL INFORMATION:
; APPLICANT: HOGREFE, Holly
; TITLE OF INVENTION: Polymerase Enhancing Factor (PEF)
; TITLE OF INVENTION: Extracts, PEF Protein Complexes, Isolated PEF Proteins,
; TITLE OF INVENTION: and Methods for Purifying and Identifying Same
```

GenCore version 5.1.3
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OM nuclear - nucleic search, using sw model

Run on: January 21, 2003, 14:54:52 : Search time 142.611 Seconds
(without alignments)
268.450 Million cell updates/sec

Title: us-09-853-688-35

Perfect score: 17
Sequence: 1 gggagccagcaatgc 17

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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22: /SID52/gcgdata/geneseq/geneseq-emb1/NA2001A.DAT : *
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
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| 1 | 17 | 100.0 | 17 | 24 | AA18882 |
| 2 | 17 | 100.0 | 3700 | 24 | AA18886 |
| 3 | 15.4 | 90.6 | 354 | 21 | AA18889 |
| 4 | 15.4 | 90.6 | 468 | 22 | AA18895 |
| 5 | 15.4 | 90.6 | 468 | 22 | AA18901 |
| 6 | 15.4 | 90.6 | 468 | 22 | AA18907 |
| 7 | 15.4 | 90.6 | 468 | 22 | AA18913 |
| 8 | 15.4 | 90.6 | 468 | 22 | AA18919 |
| 9 | 15.4 | 90.6 | 468 | 22 | AA18925 |

| | | | | | | |
|----|------|------|-------|----|----------|--------------------|
| 10 | 15.4 | 90.6 | 458 | 24 | AB506062 | Human genome-deriv |
| 11 | 15.4 | 90.6 | 710 | 24 | AB505786 | Human ovarian anti |
| 12 | 15.4 | 90.6 | 711 | 20 | AA215243 | Human gene express |
| 13 | 15.4 | 90.6 | 711 | 20 | AA215243 | Human gene express |
| 14 | 15.4 | 90.6 | 785 | 22 | AA194530 | Human neuroblastom |
| 15 | 15.4 | 90.6 | 805 | 18 | AA187832 | Human collagen IA2 |
| 16 | 15.4 | 90.6 | 852 | 18 | AA187832 | Human collagen IA2 |
| 17 | 15.4 | 90.6 | 1746 | 23 | AA584464 | DNA encoding novel |
| 18 | 15.4 | 90.6 | 2383 | 22 | AA584464 | DNA encoding novel |
| 19 | 15.4 | 90.6 | 2820 | 16 | AA151456 | Human full-length |
| 20 | 15.4 | 90.6 | 3120 | 21 | AA12510 | go.trka fusion use |
| 21 | 15.4 | 90.6 | 3409 | 23 | AA12510 | cDNA encoding a hu |
| 22 | 15.4 | 90.6 | 4556 | 23 | AA570098 | Drosophila melanog |
| 23 | 15.4 | 90.6 | 5086 | 24 | ABN97452 | DNA encoding novel |
| 24 | 15.4 | 90.6 | 5086 | 24 | ABN97452 | Gene #3950 used to |
| 25 | 15.4 | 90.6 | 5086 | 24 | ABN97452 | Human benign prost |
| 26 | 15.4 | 90.6 | 5086 | 24 | ABN97452 | Human Tumour Endot |
| 27 | 15.4 | 90.6 | 5086 | 24 | ABN97452 | Human Tumour Endot |
| 28 | 15.4 | 90.6 | 5086 | 24 | ABN97452 | Human Tumour Endot |
| 29 | 15.4 | 90.6 | 5086 | 24 | ABN97452 | Human Tumour Endot |
| 30 | 15.4 | 90.6 | 5145 | 21 | AA598196 | Colon adenocarcino |
| 31 | 15.4 | 90.6 | 5416 | 22 | ABN95596 | Human colon cancer |
| 32 | 15.4 | 90.6 | 5416 | 24 | ABN95596 | Collagen type I al |
| 33 | 15.4 | 90.6 | 5416 | 24 | ABN95596 | Gene #2094 used to |
| 34 | 15.4 | 90.6 | 5416 | 24 | ABN95596 | Human benign prost |
| 35 | 15.4 | 90.6 | 5416 | 24 | ABN95596 | Human benign prost |
| 36 | 15.4 | 90.6 | 5416 | 24 | ABN95596 | Colon adenocarcino |
| 37 | 15.4 | 90.6 | 5416 | 24 | ABN95596 | Colon adenocarcino |
| 38 | 15.4 | 90.6 | 5564 | 23 | ABV24693 | Lung cancer relate |
| 39 | 15.4 | 90.6 | 8778 | 23 | ABV24693 | Human prostate exp |
| 40 | 15.4 | 90.6 | 19628 | 22 | AAK71839 | Drosophila melanog |
| 41 | 15.4 | 90.6 | 25576 | 22 | AAK69089 | Human immune/haema |
| 42 | 15 | 88.2 | 392 | 21 | AAH30613 | Human immune/haema |
| 43 | 15 | 88.2 | 1041 | 22 | AAH30613 | Human gene for col |
| 44 | 15 | 88.2 | 1087 | 21 | AAH68387 | Human colon cancer |
| 45 | 15 | 88.2 | 1089 | 22 | AAH68387 | C glutamicum codin |

ALIGNMENTS

RESULT 1
ID AAS18882 standard; DNA; 17 BP.
XX AAS18882;
AC AAS18882;

DT 12-MAR-2002 (first entry)

DE Growth hormone 1 gene (GH1) specific fragment, PCR primer GH1F.

XX Growth hormone 1; GH1; osteopathic; gene therapy; protein therapy;
XX diabetes; obesity; infection; gigantism; sodium retention;
XX water retention; metabolic syndrome; mood disorder; sleep disorder;
XX Growth hormone dysfunction; familial growth hormone deficiency;
XX short stature; pituitary storage defect; human; PCR primer: GH1F; ss.

OS Homo sapiens.

PN WO200185993-A2.

XX 15-NOV-2001.

PD 14-MAY-2001; 2001WO-GB02126.

XX 12-MAY-2000; 2000GB-0011459.

XX 14-JUL-2000; 2000EP-0306004.

XX (UYWA-) UNIV WALES COLLEGE OF MEDICINE.

PI Cooper DN, Procter AM, Gregory J, Millar DS;

XX WPI; 2002-089798/12.

```
XX Detecting growth hormone variants (GHI), useful in screening patients
PT for growth hormone irregularities, comprises comparing the nucleotide
PT sequence of a GHI gene from a test sample with that of a standard
PT sequence of the human GHI
XX
XX Example 2; Page 39; 95pp; English.
XX
XX The invention described a method of detecting variation in growth hormone
CC l (GHI), and therefore GH dysfunction in an individual. The method
CC comprises comparing the nucleotide sequence of GHI gene obtained from the
CC test sample with a standard human GHI gene sequence, in order to identify
CC variation (GHI variant). The method is useful in screening patients for
CC growth hormone irregularities or producing variant proteins for treating
CC irregularities, and for the early detection and appropriate clinical
CC management of familial GH deficiency. The GHI variants are useful in
CC therapeutic, diagnostic or detection method, particularly for determining
CC binding defects and susceptibility to a disease such as diabetes, obesity
CC or infection; for treating acromegaly or gigantism conditions associated
CC with lactogenic, diabetogenic, lipolytic and protein anabolic effects,
CC conditions associated with sodium and water retention, metabolic
CC syndromes, mood and sleep disorders; diagnosing GH dysfunction and
CC determining pituitary storage defects. The GHI variants are especially
CC useful in gene therapy or protein therapy. The GHI or GH variant may also
CC be used in the preparation of a medicament, diagnostics composition or
CC kit, or detection kit. The method has the advantage of: expanding the
CC know spectrum of GHI gene mutations; evaluating the role of GHI gene
CC mutations in the etiology of short stature; identifying of the mode of
CC inheritance of novel lesions; evaluation the effects of GHI mutations on
CC the structure and function of the GH molecule and development of rapid
CC diagnostic tests for inherited GH deficiency. This sequence is the GHI
CC PCR primer. GHIF, used with GHIR (AAS18883) to amplify a GHI-specific
CC fragment, described in the method of the invention.
XX
XX Sequence 17 BP; 4 A; 6 C; 6 G; 1 T; 0 other;
SQ
Query Match 100.0%; Score 17; DB 24; Length 17;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 GGGAGCCCGAGCAATGC 17
Db 1 GGGAGCCCGAGCAATGC 17
RESULT 2
AAS18886
ID AAS18886 standard; DNA; 3700 Bp.
XX
XX AAS18886;
AC
XX
XX 12-MAR-2002 (first entry)
DT
XX
XX Growth hormone 1 gene (GHI), reference sequence.
DE
XX
XX Growth hormone 1; GHI; osteopathic; gene therapy; protein therapy;
KW diabetes; obesity; infection; acromegaly; gigantism; sodium retention;
KW water retention; metabolic syndrome; mood disorder; sleep disorder;
KW Growth hormone dysfunction; familial growth hormone deficiency;
KW short stature; pituitary storage defect; human; chromosome 17q23; ds.
XX
XX Homo sapiens.
QS
XX
XX Key Location/Qualifiers
FH sig_peptide 763..1100
FT /*tag= a
FT CDS 763..2230
FT /*tag= b
FT /product= "GHI"
FT /note= "Growth hormone 1"
FT variation replace(124,G)
FT /*tag= c
FT /standard_name= "Single nucleotide polymorphism"
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FT variation replace(128,T)
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FT variation replace(135,T)
FT /*tag= f
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FT /*tag= g
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FT variation replace(141,G)
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FT variation replace(179,C)
FT /*tag= j
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FT variation replace(188,T)
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FT variation replace(218,A)
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FT variation replace(226,G)
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FT variation replace(234,C)
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FT variation replace(284,A)
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FT /standard_name= "Single nucleotide polymorphism"
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FT /standard_name= "Single nucleotide polymorphism"
FT variation replace(508)
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FT /note= "Deletion of base A"
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FT /*tag= y
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FT variation replace(524,A)
FT /*tag= z
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FT variation replace(558,G)
FT /*tag= aa
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FT variation replace(565,G)
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FT      /replace(573,G)
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FT      /replace(585,G)
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FT      /replace(586,T)
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FT      /replace(622,G)
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FT      /standard_name=
FT      /replace(649,C)
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FT      /replace(685,A)
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FT      /standard_name=
FT      /replace(839,C)
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FT      /replace(879,G)
FT      /*tag= ar
FT      /standard_name=
FT      /replace(883,A)
FT      /*tag= as
FT      /standard_name=
FT      /replace(901,C)
FT      /*tag= at
FT      /standard_name=
FT      /replace(1010,T)
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FT      /standard_name=
FT      /tag= av
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FT      /replace(1097,A)
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FT      /standard_name=
FT      /replace(1101,T)
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FT      /tag= ay
FT      /label= "mature_GH"
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FT      /replace(1189,G)
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FT      /standard_name= "Single nucleotide polymorphism"
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Query Match      100.0%; Score 17; DB 24; Length 3700;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 GGGAGCCCCAGCAATGC 17
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Db 86 GGGAGCCCCAGCAATGC 102

RESULT 3
AAC30859/c
ID AAC30859 standard; cDNA; 354 BP.
XX AC AAC30859;
XX AC AAC30859;
XX DT 06-OCT-2000 (first entry)
XX DE Human secreted protein 5' EST, SEQ ID NO: 34934.
XX KW 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
XX KW gene therapy; chromosome mapping; ss.
XX OS Homo sapiens.
XX PN EP1033401-A2.
XX PD 06-SEP-2000.
XX PF 21-FEB-2000; 2000EP-0200610.
XX PR 26-FEB-1999; 99US-0122487.
XX PA (GEST ) GENSET.
XX PI Dumas Milne Edwards J, Duclert A, Giordano J;
XX WPI; 2000-500381/45.
XX DR
XX PT New nucleic acid that is a 5' expressed sequence tag (5' EST) for
XX PT obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
XX PT diagnostic, forensic, gene therapy and chromosome mapping procedures .
XX PS Claim 1; SEQ ID 34934; 71pp + CD-ROM; English.
XX
```

CC The present sequence is one of a large number of 5' ESTs derived from
CC mRNAs encoding secreted proteins. No ORF has yet been conclusively
CC identified within the present sequence. The 5' ESTs were prepared from
CC total human RNAs or polyA+ RNAs derived from 30 different tissues. EST
CC sequences usually correspond mainly to the 3' untranslated region (UTR)
CC of the mRNA because they are often obtained from oligo-dT primed cDNA
CC libraries. Such ESTs are not well suited for isolating cDNA sequences
CC derived from the 5' ends of mRNAs and even in those cases where longer
CC cDNA sequences have been obtained, the full 5' UTR is rarely included.
CC 5' ESTs are derived from mRNAs with intact 5' ends and can therefore be
CC used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used
CC in diagnostic, forensic, gene therapy and chromosome mapping procedures.
CC They are used to obtain upstream regulatory sequences and to design
CC expression and secretion vectors.

XX
SQ Sequence 354 BP; 90 A; 89 C; 79 G; 96 T; 0 other;

Query Match 90.6%; Score 15.4; DB 21; Length 354;
Best Local Similarity 94.1%; Pred. No. 3.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GCGAGCCCGCAGCAATGC 17
|||||
Db 148 GCGAGCCCGCAGCAATGC 132

RESULT 4

ABA57641
ID ABA57641 standard; DNA: 468 BP.

XX
AC ABA57641;

XX
DT 01-FEB-2002 (first entry)

XX
DE Human foetal liver: single exon nucleic acid probe #5946.

XX
KW Human; foetal liver: gene expression; single exon nucleic acid probe; ss.

XX
OS Homo sapiens.

XX
PN W0200157277-A2.

XX
XX 09-AUG-2001.

XX
PF 30-JAN-2001; 2001WO-US00669.

XX
PR 04-FEB-2000; 2000US-0180312.

XX
PR 26-MAY-2000; 2000US-0207456.

XX
PR 30-JUN-2000; 2000US-0608408.

XX
PR 03-AUG-2000; 2000US-0632366.

XX
PR 21-SEP-2000; 2000US-0234687.

XX
PR 27-SEP-2000; 2000US-0236359.

XX
PR 04-OCT-2000; 2000GB-0024263.

XX
PA (MOLE-) MOLECULAR DYNAMICS INC.

XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;

XX
XX WPI; 2001-483447/52.

XX
XX Human genome-derived single exon nucleic acid probes useful for
XX analyzing gene expression in human fetal liver -

XX
XX Claim 1; SEQ ID NO 5946; 639pp + sequence listing; English.

XX
CC The invention relates to a single exon nucleic acid probe for
CC measuring human gene expression in a sample derived from human foetal

CC liver. The single exon nucleic acid probes may be used for predicting,
CC measuring and displaying gene expression in samples derived from human

CC foetal liver. The present sequence is a single exon nucleic acid
CC probe of the invention.

CC
CC Note: The sequence data for this patent did not form part of the
GC printed specification, but was obtained in electronic format directly

CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.

XX
SQ Sequence 468 BP; 113 A; 116 C; 146 G; 93 T; 0 other;

Query Match 90.6%; Score 15.4; DB 22; Length 468;

Best Local Similarity 94.1%; Pred. No. 3.1e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GCGAGCCCGCAGCAATGC 17
|||||

Db 416 GCGAGCCCGCAGCAATTC 432

RESULT 5

ABA27062
ID ABA27062 standard; DNA: 468 BP.

XX
AC ABA27062;

XX
DT 23-JAN-2002 (first entry)

XX
DE Probe #5528 for gene expression analysis in human heart cell sample.

XX
KW Human; gene expression; heart; microarray; vascular system; probe;

XX
KW cardiovascular disease; hypertension; cardiac arrhythmia;

XX
KW congenital heart disease; ss.

XX
OS Homo sapiens.

XX
PN W0200157274-A2.

XX
XX 09-AUG-2001.

XX
PF 30-JAN-2001; 2001WO-US00666.

XX
PR 04-FEB-2000; 2000US-0180312.

XX
PR 26-MAY-2000; 2000US-0207456.

XX
PR 30-JUN-2000; 2000US-0608408.

XX
PR 03-AUG-2000; 2000US-0632366.

XX
PR 21-SEP-2000; 2000US-0234687.

XX
PR 27-SEP-2000; 2000US-0236359.

XX
PR 04-OCT-2000; 2000GB-0024263.

XX
PA (MOLE-) MOLECULAR DYNAMICS INC.

XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;

XX
XX WPI; 2001-488999/53.

XX
XX Single exon nucleic acid probes for analyzing gene expression in human

XX
XX hearts -

XX
PS Claim 1; SEQ ID NO 5528; 530pp; English.

XX
CC The present invention relates to single exon nucleic acid probes for

CC measuring human gene expression in a sample derived from human heart. The

CC present sequence is one such probe. The probes may be used for

CC predicting, measuring and displaying gene expression in samples derived

CC from the human heart via microarrays. By measuring gene expression, the

CC probes are useful for predicting, diagnosing, grading, staging,

CC monitoring and prognosing diseases of the human heart and vascular system

CC e.g. cardiovascular disease, hypertension, cardiac arrhythmias and

CC congenital heart disease.

CC Note: The sequence data for this patent did not form part of the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published_pct_sequences.

XX
SQ Sequence 468 BP; 113 A; 116 C; 146 G; 93 T; 0 other;

Query Match 90.6%; Score 15.4; DB 22; Length 468;

Best Local Similarity 94.1%; Pred. No. 3.1e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

QY      1 GGGAGCCCCCAGCAATGC 17
      IIIIIIIIIIII I
Db      416 GGGAGCCCCCAGCAATTC 432

RESULT 6
AAK05695
ID      AAK05695 standard; DNA; 468 BP.
XX
AC      AAK05695;
XX
DT      05-NOV-2001 (first entry)
XX
DE      human brain expressed single exon probe SEQ ID NO: 5686.
XX
KW      Human; brain expressed exon; gene expression analysis; probe;
KW      microarray; Alzheimer's disease; multiple sclerosis; schizophrenia;
KW      epilepsy; cancer; ss.
XX
OS      Homo sapiens.
XX
PN      WO200157275-A2.
XX
PD      09-AUG-2001.
XX
PF      30-JAN-2001; 2001WO-US00667.
XX
PR      04-FEB-2000; 2000US-0180312.
PR      26-MAY-2000; 2000US-0207456.
PR      30-JUN-2000; 2000US-0608408.
PR      03-AUG-2000; 2000US-0632366.
PR      21-SEP-2000; 2000US-0234687.
PR      27-SEP-2000; 2000US-0236359.
PR      04-OCT-2000; 2000GB-0024263.
XX
PA      (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI      Penn SG, Hanzel DK, Chen W, Rank DR;
XX
WPI: 2001-483446/52.
XX
Single exon nucleic acid probes for analyzing gene expression in human
brains -
Example 4; SEQ ID NO: 5686; 650pp + Sequence Listing; English..
The present invention provides a number of single exon nucleic acid
probes which are derived from genomic sequences expressed in the human
brain. They can be used to measure gene expression in brain cell samples,
which may enable the diagnosis and improved treatment of nervous system
diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
epilepsy and cancers. The present sequence is one of the probes of the
invention.
XX
Sequence 468 BP; 113 A; 116 C; 146 G; 93 T; 0 other;

Query Match      90.6%; Score 15.4; DB 22; Length 468;
Best Local Similarity 94.1%; Pred. NO. 3.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 GGGAGCCCCCAGCAATGC 17
      IIIIIIIIIIII I
Db      416 GGGAGCCCCCAGCAATTC 432

RESULT 7
AAK31310
ID      AAK31310 standard; DNA; 468 BP.
XX
AC      AAK31310;
XX
DT      06-NOV-2001 (first entry)
XX
DE      human bone marrow expressed single exon probe SEQ ID NO: 5867.
XX
KW      Human; bone marrow expressed exon; gene expression analysis; probe;
KW      microarray; cancer; leukaemia; lymphoma; myeloma; ss.
XX
OS      Homo sapiens.
XX
PN      WO200157276-A2.
XX
PD      09-AUG-2001.
XX
PF      30-JAN-2001; 2001WO-US00668.
XX
PR      04-FEB-2000; 2000US-0180312.
PR      26-MAY-2000; 2000US-0207456.
PR      30-JUN-2000; 2000US-0608408.
PR      03-AUG-2000; 2000US-0632366.
PR      21-SEP-2000; 2000US-0234687.
PR      27-SEP-2000; 2000US-0236359.
PR      04-OCT-2000; 2000GB-0024263.
XX
PA      (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI      Penn SG, Hanzel DK, Chen W, Rank DR;
XX
WPI: 2001-488900/53.
XX
Human genome-derived single exon nucleic acid probes useful for
analyzing gene expression in human bone marrow -
Example 4; SEQ ID NO: 5867; 658pp + Sequence Listing; English..
The present invention provides a number of single exon nucleic acid
probes which are derived from genomic sequences expressed in the human
bone marrow. They can be used to measure gene expression in bone marrow
samples, which may enable the improved diagnosis and treatment of cancers
such as lymphoma, leukaemia and myeloma. The present sequence is one of
the probes of the invention.
XX
Sequence 468 BP; 113 A; 116 C; 146 G; 93 T; 0 other;

Query Match      90.6%; Score 15.4; DB 22; Length 468;
Best Local Similarity 94.1%; Pred. NO. 3.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1 GGGAGCCCCCAGCAATGC 17
      IIIIIIIIIIII I
Db      416 GGGAGCCCCCAGCAATTC 432

RESULT 8
AAI15629
ID      AAI15629 standard; DNA; 468 BP.
XX
AC      AAI15629;
XX
DT      12-OCT-2001 (first entry)
XX
DE      Probe #5562 for gene expression analysis in human cervical cell sample.
XX
KW      Probe; human; microarray; gene expression; cervical epithelial cell;
KW      cervical cancer; ss.
XX
OS      Homo sapiens.
XX
PN      WO200157278-A2.
XX
PD      09-AUG-2001.
XX
PF      30-JAN-2001; 2001WO-US00670.
XX
PR      04-FEB-2000; 2000US-0180312.
PR      26-MAY-2000; 2000US-0207456.

```


PR 30-JUN-2000; 2000US-0608408.
 PR 03-AUG-2000; 2000US-0632366.
 PR 21-SEP-2000; 2000US-0234687.
 PR 27-SEP-2000; 2000US-0236359.
 PR 04-OCT-2000; 2000GB-0024263.
 XX
 PA (MOLE-) MOLECULAR DYNAMICS INC.
 XX
 PI Penn SG, Hanzel DK, Chen W, Rank DK;
 XX
 XX WPI; 2001-488901/53.
 DR
 XX
 XX Human genome-derived single exon nucleic acid probes useful for
 PT analyzing gene expression in human cervical epithelial cells -
 XX
 XX Claim 25; SEQ ID NO 5562; 487pp; English.
 XX
 CC The present invention relates to human single exon nucleic acid probes
 CC (SENP). The present sequence is one such probe. The SENPs are derived
 CC from human HeLa cells. The SENPs can be used to produce a single exon
 CC microarray, which can be used for measuring human gene expression in a
 CC sample derived from human cervical epithelial cells. By measuring gene
 CC expression, the probes are therefore useful in grading and/or staging
 CC of diseases of the cervix, notably cervical cancer.
 CC Note: The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences.
 XX
 XX Sequence 468 BP; 113 A; 116 C; 146 G; 93 T; 0 other;
 SQ
 Query Match 90.6%; Score 15.4; DB 22; Length 468;
 Best Local Similarity 94.1%; Pred. No. 3.1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 GGGAGCCCCAGCAATGC 17
 Db 416 GGGAGCCCCAGCAATTC 432
 RESULT 9
 AA137207
 ID AA137207 standard; DNA; 468 BP.
 AC AA137207;
 XX
 XX 17-OCT-2001 (first entry)
 DT
 DE Probe #5893 used to measure gene expression in human placenta sample.
 XX
 XX Probe; microarray; human; placenta; antenatal diagnosis;
 KW genetic disorder; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200157272-A2.
 PN
 XX
 PD 09-AUG-2001.
 XX
 XX 30-JAN-2001; 2001WO-US00663.
 PF
 XX 04-FEB-2000; 2000US-0180312.
 PR 26-MAY-2000; 2000US-0207456.
 PR 30-JUN-2000; 2000US-0608408.
 PR 03-AUG-2000; 2000US-0632366.
 PR 21-SEP-2000; 2000US-0234687.
 PR 27-SEP-2000; 2000US-0236359.
 PR 04-OCT-2000; 2000GB-0024263.
 XX
 PA (MOLE-) MOLECULAR DYNAMICS INC.
 XX
 PI Penn SG, Hanzel DK, Chen W, Rank DK;
 XX
 XX WPI; 2001-488901/53.
 DR

XX Human genome-derived single exon nucleic acid probes useful for
 PT analyzing gene expression in human placenta -
 XX
 XX Claim 25; SEQ ID NO 5893; 654pp; English.
 XX
 CC The present invention relates to single exon nucleic acid probes (SENP).
 CC The present sequence is one such probe. The probes are useful for
 CC producing a microarray for predicting, measuring and displaying gene
 CC expression in samples derived from human placenta. The probes are useful
 CC for antenatal diagnosis of human genetic disorders.
 XX
 XX Sequence 468 BP; 113 A; 116 C; 146 G; 93 T; 0 other;
 SQ
 Query Match 90.6%; Score 15.4; DB 22; Length 468;
 Best Local Similarity 94.1%; Pred. No. 3.1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 GGGAGCCCCAGCAATGC 17
 Db 416 GGGAGCCCCAGCAATTC 432
 RESULT 10
 ABS06062
 ID ABS06062 standard; DNA; 468 BP.
 XX
 AC ABS06062;
 XX
 XX 19-AUG-2002 (first entry)
 DT
 DE Human genome-derived single exon probe from lung SEQ ID NO 6053.
 DE
 XX Human; ds; single exon probe; asthma; lung cancer; COPD; ILD;
 KW chronic obstructive pulmonary disease; interstitial lung disease;
 KW familial idiopathic pulmonary fibrosis; neurofibromatosis;
 KW tuberous sclerosis; Gaucher's disease; Niemann-Pick disease;
 KW hermannsky-pudlak syndrome; sarcoidosis; pulmonary haemorrhoidosis;
 KW pulmonary histiocytosis; lymphangioleiomyomatosis; karagener syndrome;
 KW pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia;
 KW primary ciliary dyskinesia; pulmonary hypertension;
 KW hyaline membrane disease.
 KW
 XX Homo sapiens.
 OS
 XX
 XX WO200186003-A2.
 PN
 XX
 PD 15-NOV-2001.
 XX
 XX 30-JAN-2001; 2001WO-US00665.
 PF
 XX 04-FEB-2000; 2000US-180312P.
 PR 26-MAY-2000; 2000US-207456P.
 PR 30-JUN-2000; 2000US-0608408.
 PR 03-AUG-2000; 2000US-0632366.
 PR 21-SEP-2000; 2000US-234687P.
 PR 27-SEP-2000; 2000US-236359P.
 PR 04-OCT-2000; 2000GB-0024263.
 XX
 PA (MOLE-) MOLECULAR DYNAMICS INC.
 XX
 XX Penn SG, Hanzel DK, Chen W, Rank DK;
 XX
 XX WPI; 2002-114183/15.
 DR
 XX Spatially-addressable set of single exon nucleic acid probes, used to
 PT measure gene expression in human lung samples -
 XX
 XX Claim 1; SEQ ID NO 6053; 634pp; English.
 XX
 XX The invention relates to a spatially-addressable set of single exon
 CC nucleic acid probes for measuring gene expression in a sample derived
 CC from human lung comprising single exon nucleic acid probes having one of

12614 nucleic acid sequences mentioned in the specification, or their complements or the 12387 open reading frames derived from the 12614 probes. Also included are a microarray comprising the novel set of probes; the novel set of probes which hybridize at high stringency to a nucleic acid expressed in the human lung; measuring gene expression in a sample derived from human lung, comprising (a) contacting the array with a collection of detectably labeled nucleic acids derived from human lung mRNA, and (b) measuring the label detectably bound to each probe of the array; identifying exons in a eukaryotic genome, comprising (a) algorithmically predicting at least one exon from genomic sequences of the eukaryote; and (b) detecting specific hybridisation of detectably labeled nucleic acids from eukaryote lung mRNA, to a single exon probe. In the above mentioned microarray; assigning exons to a single gene, comprising (a) identifying exons from genomic sequence by the method above and (b) measuring the expression of each of the exons in several tissues and/or cell types using hybridisation to a single exon microarrays having a probe with the exon, where a common pattern of expression of the exons in the tissues and/or cell types indicates that the exons should be assigned to a single gene; a peptide comprising one of 12011 sequences, mentioned in the specification, or encoded by the probes/open reading frames (ORF). The probes are used for gene expression analysis, and for identifying exons in a gene, particularly using human lung derived mRNA and for the study of lung diseases such as asthma, lung cancer, chronic obstructive pulmonary disease (COPD), interstitial lung disease (ILD), familial idiopathic pulmonary fibrosis, neurofibromatosis, tuberous sclerosis, Gaucher's disease, Niemann-Pick disease, Hermansky-Pudlak syndrome, sarcoidosis, pulmonary haemangioendothelioma, pulmonary histiocytosis, lymphangioleiomyomatosis, pulmonary alveolar proteinosis, Karagener syndrome, fibrocystic pulmonary dysplasia, primary ciliary dyskinesia, pulmonary hypertension and hyaline membrane disease. The present sequence is a single exon probe of the invention.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.

Sequence 468 BP; 113 A; 116 C; 146 G; 93 T; 0 other;

Query Match 90.6%; Score 15.4; DB 24; Length 468;
Best Local Similarity 94.1%; Pred. No. 3.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GGGAGCCCCAGCAATGC 17
|||||
DB 416 GGGAGCCCCAGCAATTC 432

RESULT 11
ABQ55786
ID ABQ55786 standard; cDNA; 710 BP.

XX AC ABQ55786;

DT 22-AUG-2002 (first entry)

DE Human ovarian antigen HOPKO61 cDNA, SEQ ID NO:1666.

XX Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour;
KW ovarian cancer; breast cancer; tumour; reproductive system disorder;
KW infertility; pregnancy disorder; anovulation; polycystic ovary syndrome;
KW PCOS; ovarian cyst; dysmenorrhea; endocrine disorder; infection;
KW inflammatory condition; immune disorder; blood disorder;
KW cardiovascular disorder; respiratory disorder; neurological disorder;
KW gastrointestinal disorder; urinary system disorder; drug screening;
KW gene therapy; chromosome mapping; forensic analysis;
KW antibody preparation; cytostatic; immunomodulatory; neuroprotective;
KW antiinflammatory; gynaecological; reproductive; gene; ss.

OS Homo sapiens.

XX WO200200677-A1.

Human gene expression product cDNA sequence SEQ ID NO:2712.

XX 03-JAN-2002.
PD
XX 07-JUN-2001; 2001WO-US18569.
PF
XX 07-JUN-2000; 2000US-209467P.
PR
XX (HUMA-) HUMAN GENOME SCI INC.
PA

PI Birse CE, Rosen CA;

XX WPI: 2002-147878/19.

DR P-PSDB; ARP42709.

XX Isolated nucleic acid molecules encoding novel ovarian polypeptides,
PT useful in the prevention, treatment and diagnosis of cancer (e.g.
PT ovarian cancer), immune disorders, cardiovascular disorders and
PT neurological diseases -

XX Claim 1: SEQ ID NO 1666; 2922pp; English.

XX The invention relates to 2175 novel human ovarian antigens (ABP41054-
CC ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also
CC encompasses polypeptides 90% identical and polynucleotides 95% identical
CC to the sequences of the invention. The invention additionally relates to
CC recombinant vectors and host cells comprising human ovarian antigen
CC polynucleotides, antibodies against human ovarian antigens, and the use
CC of ovarian antigen polynucleotides and polypeptides in diagnosing,
CC treating, prognosing or preventing various ovary and/or breast-related
CC disorders. Such conditions include ovarian cancer and breast cancer, and
CC metastatic tumours of ovarian or breast origin, reproductive system
CC disorders (e.g., infertility, disorders of pregnancy, anovulation,
CC polycystic ovary syndrome, ovarian cysts, and dysmenorrhea), endocrine
CC disorders, infections (e.g., chlamydia, HIV, toxoplasmosis, and toxic
CC shock syndrome), inflammatory conditions (e.g., mastitis, oophoritis and
CC vaginitis), immune disorders (e.g., congenital and acquired
CC immunodeficiencies, autoimmune oophoritis, systemic lupus erythematosus),
CC blood-related disorders (e.g., anaemia), cardiovascular disorders,
CC respiratory disorders, neurological disorders, gastrointestinal disorders
CC and urinary system disorders. Ovarian antigen polypeptides and
CC polynucleotides may also be used in screening for compounds which
CC modulate ovarian antigen expression or activity. The polynucleotides may
CC further be used for gene therapy, chromosome mapping, in the
CC identification of individuals and in forensic analysis, and the
CC polypeptides may be used as food additives or to prepare antibodies
CC useful in disease diagnosis, drug targeting and phenotyping. The present
CC sequence represents cDNA encoding a human ovarian antigen of the
CC invention.

CC Note: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.

XX Sequence 710 BP; 113 A; 244 C; 222 G; 125 T; 6 other;

Query Match 90.6%; Score 15.4; DB 24; Length 710;
Best Local Similarity 94.1%; Pred. No. 3.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GGGAGCCCCAGCAATGC 17
|||||
DB 474 GGGAGCCCCAGCAATGC 490

RESULT 12

AAZ15243

ID AAZ15243 standard; cDNA; 711 BP.

XX AAZ15243;

XX 12-OCT-1999 (first entry)

DT

XX

KW Human: gene: gene expression product; diagnosis; therapy; probe;
 KW detection; mapping; tissue typing; profiling; forensic; cancer;
 KW genetic analysis; colorectal cancer; breast cancer; lung cancer; ss.
 XX
 XX Homo sapiens.
 OS WO9938972-A2.
 XX
 XX 05-AUG-1999.
 PD
 XX 28-JAN-1999; 99WO-US01619.
 XX
 XX 03-APR-1998; 98US-0080666.
 PR 28-JAN-1998; 98US-0072910.
 PR 24-FEB-1998; 98US-0075954.
 PR 31-MAR-1998; 98US-0080114.
 PR 03-APR-1998; 98US-0080515.
 XX
 XX (CHIR) CHIRON CORP.
 PA (HYSE-) HYSEQ INC.
 PA
 XX Crkvenjakov R, Drmanac R, Drmanac S;
 PI Escobedo J, Garcia PD, Garcia V, Giese K, Innis MA;
 PI Jones WL, Kassam A, Kennedy GC, Kita D, Labat I;
 PI Lamson G, Leshkowitz D, Pot D, Randazzo F, Reinhard C;
 PI Stache-Crain B, Sudduth-Klinger J, Williams LT;
 XX WPI: 1999-494092/41.
 DK
 XX Novel human genes and their expression products which are
 PT differentially expressed in different cell types
 PT
 XX Claim 1: Page 1317; 2479pp; English.
 PS
 XX The present invention describes a library of human polynucleotides
 CC comprising the sequences given in AA212532 to AA217779. Also described is
 CC a method of detecting differentially expressed genes correlated with the
 CC cancerous state of a mammalian cell, comprising detecting at least one
 CC differentially expressed gene product in a test sample from a cell
 CC suspected of being cancerous, where the gene product is encoded by one
 CC of the 5248 polynucleotide sequences given in AA212532 to AA217779. The
 CC polynucleotides can be used as a source of primers and probes, which can
 CC be used for a variety of purpose, e.g. detection of expression levels,
 CC mapping, tissue typing or profiling, forensics, genetic analysis and
 CC detection of polymorphisms. Polypeptides encoded by the polynucleotides
 CC can be used for raising antibodies for experimental, diagnostic and
 CC therapeutic purposes. The polynucleotides may also be used to construct
 CC arrays for diagnostics (which may be used to determine function of an
 CC encoded protein); and to detect differences in expression levels between
 CC two cells (e.g. to identify abnormal or diseased tissue in a human, to
 CC identify a genetic predisposition or susceptibility to a disease such as
 CC cancer). The polynucleotides of the invention are especially used in the
 CC diagnosis, prognosis and management of colorectal cancer, breast cancer,
 CC and lung cancer. The polynucleotides can also be used to screen for
 CC peptide analogues and antagonists.
 XX
 XX Sequence 711 BP: 137 A; 214 C; 194 G; 159 T; 7 other;
 S0
 Query Match 90.6%; Score 15.4; DB 20; Length 711;
 Best Local Similarity 94.1%; Pred. No. 3.2e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 GGGAGCCCCCAGCATGC 17
 DB 478 GGGAGCCCCCAGCAACG 494
 RESULT 13
 ID AAX98799
 XX AAX98799 standard; cDNA: 711 BP.
 XX
 XX AAX98799;
 AC
 XX

DT 24-SEP-1999 (first entry)
 XX Human validated cancer cell derived cDNA #121.
 DE
 XX Cancer: human; colon; breast; lung; transmembrane receptor; ATPase;
 KW integral membrane protein; aspartyl protease; GATA family; wnt family;
 KW transcription factor; G-protein alpha subunit; protein phosphatase;
 KW phospholipase binding protein; diacylglycerol binding protein; trypsin;
 KW protein kinase; tyrosine phosphatase; developmental signalling protein;
 KW WW/rsp5/WMP domain; therapy; forensic; genetic mapping; diagnostic;
 KW detection; treatment; cervical; melanoma; colorectal adenocarcinoma;
 KW Wilm's tumour; retinoblastoma; sarcoma; myosarcoma; lung carcinoma;
 KW leukemia; lymphoma; dysplasia; hyperplasia; endometrium; adrenal;
 KW prostate; ss.
 XX Homo sapiens.
 OS WO9933982-A2.
 XX
 XX 08-JUL-1999.
 PD
 XX 22-DEC-1998; 98WO-US27610.
 PF
 XX 21-DEC-1998; 98US-0217471.
 PR 23-DEC-1997; 97US-0068755.
 PR 03-APR-1998; 98US-0080664.
 PR 21-OCT-1998; 98US-0105234.
 PR 27-OCT-1998; 98US-0105877.
 XX
 XX (CHIR) CHIRON CORP.
 PA (HYSE-) HYSEQ INC.
 PA
 XX Crkvenjakov R, Drmanac R, Drmanac S;
 PI Escobedo J, Garcia PD, Garcia V, Giese K, Innis MA;
 PI Jones WL, Kassam A, Kennedy GC, Kita D, Labat I;
 PI Lamson G, Leshkowitz D, Pot D, Randazzo F, Reinhard C;
 PI Stache-Crain B, Sudduth-Klinger J, Williams LT;
 XX WPI: 1999-430243/36.
 DR
 XX New isolated human polynucleotides
 PT
 XX Claim 1: Page 462; 591pp; English.
 PS
 XX This invention describes novel isolated human polynucleotides obtained
 CC by screening for differential expression in colon cancer, breast cancer
 CC and lung cancer cell lines. The polynucleotides of the invention are
 CC represented in AAX98275-X99118 and encode polypeptides of protein
 CC families selected from 4 transmembrane segments integral membrane
 CC proteins, 7 transmembrane receptors, ATPases associated with various
 CC cellular activities (AAA), eukaryotic aspartyl proteases, GATA family of
 CC transcription factors, G-protein alpha subunit, phospholipase or
 CC diacylglycerol binding proteins, protein kinase, protein phosphatase 2C,
 CC protein tyrosine phosphatase, trypsin, wnt family of developmental
 CC signalling proteins and WW/rsp5/WMP domain containing proteins. The
 CC encoded polypeptides also have a functional domain selected from Ank
 CC repeat, basic region plus leucine zipper transcription factors,
 CC bromodomain, EF-hand, SH3 domain, WD domain/G-beta repeats, zinc finger
 CC (C2H2 type), zinc finger (CCHC class), and zinc-binding metalloprotease
 CC domain. The polynucleotides encode polypeptides with similarity to known
 CC protein families and are predicted to have similar properties. The novel
 CC polynucleotides can be used to develop products for use as therapeutic
 CC agents and in forensics, genetic analysis, mapping and diagnostic
 CC applications. In particular, the product can be used for the detection
 CC and management of cancers. They can be used for treating e.g. cervical
 CC cancers, melanomas, colorectal adenocarcinomas, Wilm's tumour, sarcomas,
 CC retinoblastoma, myosarcomas, lung carcinomas, leukemias, such as chronic
 CC myelogenous leukemia, promyelocytic leukemia, monocytic leukemia, and
 CC myeloid leukemia, and lymphomas such as histiocytic lymphoma, anhydric
 CC hereditary ectodermal dysplasia, congenital alveolar dysplasia, and
 CC epithelial dysplasia of the cervix, fibrous dysplasia of bone, and
 CC mammary dysplasia, hyperplasias, e.g. endometrial, adrenal, breast,
 CC prostate or thyroid hyperplasias or pseudoepitheliomatous hyperplasia of

```

CC the skin.
XX
SQ Sequence 711 BP; 137 A; 214 C; 194 G; 159 T; 7 other;

  Query Match          90.6%; Score 15.4; DB 20; Length 711;
  Best Local Similarity 94.1%; Pred. No. 3.2e+02;
  Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GGGAGCCCCCAGCAATGC 17
DB 478 GGGAGCCCCCAGCAAGC 494

RESULT 14
AA194530
ID AA194530 standard; cDNA; 785 BP.
XX
AC AA194530;
XX
DT 13-NOV-2001 (first entry)
XX
DE Human neuroblastoma expressed polynucleotide SEQ ID NO 605.
XX
KW Human; neuroblastoma; malignancy; cancer; tumour marker; N-myc; TrkA; ss.
XX
OS Homo sapiens.
XX
PN WO200166719-A1.
XX
PD 13-SEP-2001.
XX
PF 02-MAR-2001; 2001WO-JP01629.
XX
PR 07-MAR-2000; 2000JP-0159195.
XX
PA (CHIB-) CHIBA PREFECTURE.
PA (HISM) HISAMITSU PHARM CO LTD.
XX
PI Nakagawara A;
XX
WPI; 2001-565584/63.
XX
Nucleic acids originating in gene expressed in human neuroblastoma,
PT useful as probe or primer in diagnosing prognosis of human
PT neuroblastoma, malignancy and susceptibility indicator or tumour marker
PT for anti-cancer agents -
XX
Claim 1; Page 484-485; 2979pp; Japanese.
XX
The invention relates to novel genes (AA193926-AA197963) expressed in
CC human neuroblastoma. The nucleic acids are applicable as a probe or
CC primer in diagnosing the prognosis of human neuroblastoma, malignancy and
CC susceptibility indicators or tumour markers for anti-cancer agents. The
CC gene information for diagnosing prognosis is related to factors similar
CC to that for N-myc and TrkA genes.
XX
SQ Sequence 785 BP; 179 A; 261 C; 189 G; 135 T; 21 other;

  Query Match          90.6%; Score 15.4; DB 22; Length 785;
  Best Local Similarity 94.1%; Pred. No. 3.2e+02;
  Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GGGAGCCCCCAGCAATGC 17
DB 359 GGAAGCCCCCAGCAATGC 375

RESULT 15
AA187832
ID AA187832 standard; cDNA; 805 BP.
XX
AC AA187832;
XX

```

```

DT 14-MAY-1998 (first entry)
XX
DE human collagen 1A2 cDNA sequence containing the A polymorphism 907.
XX
KW Human; collagen 1A2; A polymorphism 907;
KW endogenous gene suppression; ss.
XX
OS Homo sapiens.
XX
PN WO9737014-A1.
XX
PD 09-OCT-1997.
XX
PF 02-APR-1997; 97WO-GB00929.
XX
PR 02-APR-1996; 96GB-0006961.
XX
PA (QUEEN-) QUEEN ELIZABETH COLLEGE DUBLIN.
XX
PI Farrar GJ, Humphries P, Kenna PF;
XX
WPI; 1997-503100/46.
XX
Endogenous gene suppression and replacement - useful in genetic
PT disease therapy
PT
PS Example 4; Page 82; 90pp; English.
XX
CC The present sequence was used in the development of a novel
CC strategy for suppressing at least part of the coding region of an
CC endogenous gene (tg), and replacing the suppressed gene sequence
CC with a nucleic acid sequence which differs from the EG. The
CC strategy can be useful when the gene, which is naturally present in
CC the genome of a patient, contributes to a disease state. Generally,
CC one allele of the gene will be mutated, i.e. it will possess
CC alterations in its nucleotide sequence that affect the function or
CC level of the gene product, e.g. the alteration may result in an
CC altered protein product from the wild type gene or control of
CC transcription and processing. Inheritance or somatic acquisition of
CC such a mutation can give rise, or predispose an individual to a
CC disease phenotype. However the gene can also be of wild type
CC phenotype, but contribute to a disease state in another way, so
CC that suppression would alleviate or improve the disease state or
CC improve the effectiveness of an administered therapeutic compound.
XX
SQ Sequence 805 BP; 179 A; 233 C; 162 G; 163 T; 68 other;

  Query Match          90.6%; Score 15.4; DB 18; Length 805;
  Best Local Similarity 94.1%; Pred. No. 3.2e+02;
  Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GGGAGCCCCCAGCAATGC 17
DB 49 GGGAGCCCCCAGCAAGC 65

Search completed: January 21, 2003, 16:27:58
Job time : 144.611 secs

```

GenCore version 5.1.3
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OM nucleic - nucleic search, using sw model

Run On: January 21, 2003, 14:52:32 : Search time 1340.03 Seconds
(without alignments)
229.633 Million cell updates/sec

Title: US-09-853-688-36
Perfect score: 19
Sequence: 1 ttaggaagctcgggtgc 19

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 16154066 seqs, 8097743376 residues

Total number of hits satisfying chosen parameters: 32308132

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

EST: *
1: em_estba: *
2: em_estlin: *
3: em_estlin: *
4: em_estlin: *
5: em_estlin: *
6: em_estlin: *
7: em_estlin: *
8: em_estlin: *
9: gb_est1: *
10: gb_est2: *
11: gb_est3: *
12: gb_est3: *
13: gb_est4: *
14: gb_est5: *
15: em_estfun: *
16: em_estom: *
17: gb_gss: *
18: em_gss_hum: *
19: em_gss_inv: *
20: em_gss_pln: *
21: em_gss_vrt: *
22: em_gss_fun: *
23: em_gss_mam: *
24: em_gss_mus: *
25: em_gss_othr: *
26: em_gss_pro: *
27: em_gss_rod: *

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description |
|------------|-------|-------------|--------|----|-------------|
| c 1 | 19 | 100.0 | 629 | 17 | AQ047255 |
| c 2 | 17 | 89.5 | 478 | 17 | AZ165947 |
| c 3 | 16.4 | 86.3 | 223 | 10 | BB148197 |
| c 4 | 16.4 | 86.3 | 245 | 10 | BB365770 |
| c 5 | 16.4 | 86.3 | 252 | 17 | CNS048J2 |
| c 6 | 16.4 | 86.3 | 302 | 10 | BB041120 |

| | | | | | |
|------|------|------|------|----|----------|
| c 7 | 16.4 | 86.3 | 365 | 17 | AQ062287 |
| c 8 | 16.4 | 86.3 | 386 | 17 | AZ739644 |
| c 9 | 16.4 | 86.3 | 570 | 13 | BI064819 |
| c 10 | 16.4 | 86.3 | 560 | 17 | AG074600 |
| c 11 | 16.4 | 86.3 | 724 | 12 | BB873650 |
| c 12 | 16.4 | 86.3 | 974 | 17 | CNS0444T |
| c 13 | 16.4 | 86.3 | 299 | 14 | BQ256354 |
| c 14 | 16.4 | 86.3 | 530 | 17 | BH326060 |
| c 15 | 16.4 | 86.3 | 908 | 17 | AZ206811 |
| c 16 | 16.4 | 86.3 | 1146 | 14 | BM805318 |
| c 17 | 15.8 | 83.2 | 187 | 9 | AV016693 |
| c 18 | 15.8 | 83.2 | 216 | 9 | AV249326 |
| c 19 | 15.8 | 83.2 | 225 | 9 | AV141285 |
| c 20 | 15.8 | 83.2 | 232 | 9 | AT447750 |
| c 21 | 15.8 | 83.2 | 261 | 17 | AZ704742 |
| c 22 | 15.8 | 83.2 | 279 | 9 | AI585575 |
| c 23 | 15.8 | 83.2 | 279 | 9 | AV211876 |
| c 24 | 15.8 | 83.2 | 289 | 10 | BB469541 |
| c 25 | 15.8 | 83.2 | 298 | 10 | BE142089 |
| c 26 | 15.8 | 83.2 | 355 | 12 | BE138757 |
| c 27 | 15.8 | 83.2 | 397 | 9 | AA796032 |
| c 28 | 15.8 | 83.2 | 401 | 9 | AA138247 |
| c 29 | 15.8 | 83.2 | 442 | 9 | AA153692 |
| c 30 | 15.8 | 83.2 | 444 | 9 | AI645531 |
| c 31 | 15.8 | 83.2 | 448 | 17 | BH752980 |
| c 32 | 15.8 | 83.2 | 484 | 12 | BE918602 |
| c 33 | 15.8 | 83.2 | 496 | 9 | AI647277 |
| c 34 | 15.8 | 83.2 | 508 | 13 | BI811221 |
| c 35 | 15.8 | 83.2 | 521 | 9 | AI721115 |
| c 36 | 15.8 | 83.2 | 532 | 13 | BM220909 |
| c 37 | 15.8 | 83.2 | 536 | 14 | BQ394880 |
| c 38 | 15.8 | 83.2 | 542 | 17 | AZ860432 |
| c 39 | 15.8 | 83.2 | 543 | 17 | AZ883006 |
| c 40 | 15.8 | 83.2 | 554 | 9 | AU148749 |
| c 41 | 15.8 | 83.2 | 586 | 10 | AV958045 |
| c 42 | 15.8 | 83.2 | 593 | 14 | BQ745854 |
| c 43 | 15.8 | 83.2 | 594 | 14 | BP016690 |
| c 44 | 15.8 | 83.2 | 599 | 17 | AZ358149 |
| c 45 | 15.8 | 83.2 | 612 | 17 | AZ886074 |

ALIGNMENTS

RESULT 1
LOCUS AQ047255/c 629 bp DNA linear GSS 14-APR-1999
DEFINITION RPC111-32118.TK RPC1-11 Homo sapiens genomic clone RPC1-11-32118,
DNA sequence.
ACCESSION AQ047255
VERSION AQ047255.1 GI:3316182
KEYWORDS GSS.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 629)
AUTHORS Adams,M.D., Rounsley,S.D., Zhao,S., Field,C.E., Bass,S., Linher,K., Golden,K., Berry,K., Granger,D., Suh,E., Wible,C., de Jong,P. and Venter,J.C.
TITLE Use of BAC End Sequences for Sequence-Ready Map Building (1998)
JOURNAL Unpublished (1998)
COMMENT Contact: Mark Adams
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 0200
Fax: 301 838 0208
Email: mdadams@igrr.org
Clones are derived from the human BAC library RPC1-11. For BAC library availability, please contact Pieter de Jong (pieter@dejong.med.buffalo.edu). Clones may be purchased from BACPAC Resources (http://bacpac.med.buffalo.edu/ordering) or from

Research Genetics (info@resgen.com). BAC end search page:
http://www.tlgr.org/tldb/humgen/bac_end_search/bac_end_search.html
 Class: BAC ends.

FEATURES

source

Location/Qualifiers

1..629
 /organism="Homo sapiens"
 /db_xref="GDB:7512113"
 /db_xref="taxon:9606"
 /clone="RPC1-11-32118"
 /clone_lib="RPC1-11"
 /sex="Male"
 /cell_type="lymphocytes"
 /note="Vector: pBACE3.6; Site_1: EcoRI; Site_2: EcoRI; RPC111 Human Male BAC Library"
 177 a 149 c 129 g 174 t

BASE COUNT

ORIGIN

Query Match 100.0%; Score 19; DB 17; Length 629;
 Best local Similarity 100.0%; Pred. NO. 1.3e+02; Indels 0; Gaps 0;
 Matches 19; Conservative 0; Mismatches 0;
 QY 1 TGTAGGAAGTCTGGGTGC 19
 Db 477 TGTAGGAAGTCTGGGTGC 459

RESULT 2
 AZ165947
 LOCUS
 DEFINITION
 SP_0083_A2_G02_77A Strongylocentrotus purpuratus, purple sea urchin
 sperm genomic BAC library Strongylocentrotus purpuratus genomic
 clone plate=83 Col=4 Row=M, DNA sequence.

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

AZ165947.1 GI:8335714
 GSS.
 Strongylocentrotus purpuratus.
 Strongylocentrotus purpuratus.
 Eukaryota; Metazoa; Echinodermata; Eleutherozoa; Echinozoa;
 Echinoidea; Euechinoidea; Echinarea; Echinoidea;
 Strongylocentrotidae; Strongylocentrotus.

REFERENCE

AUTHORS

1 (bases 1 to 478)
 Cameron,R.A., Mahairas,G., Rast,J.P., Martinez,P., Biondi,T.R.,
 Swartzell,S., Wallace,J.C., Foustka,A.J., Livingston,B.T., Wray,
 G.A., Ettensohn,C.A., Lehrach,H., Britten,R.J., Davidson,E.H. and
 Hood,L.

A sea urchin genome project: Sequence scan, virtual map, and
 additional resources

PROC. Natl. Acad. Sci. U.S.A. 97 (17), 9514-9518 (2000)

TITLE

JOURNAL

MEDLINE

COMMENT

Contact: Cameron, R.A., Davidson, E.H., Hood, L.
 Division of Biology 156-29
 California Institute of Technology
 Pasadena California 91125, USA
 Tel: (626) 395-8421
 Fax: (626) 793-3047
 Email: acameron@caltech.edu
 Plate: 83 row: M column: 4
 Seq primer: 77
 Class: BAC ends
 High quality sequence stop: 478.

FEATURES

source

Location/Qualifiers

1..478
 /organism="Strongylocentrotus purpuratus"
 /db_xref="taxon:7668"
 /clone="Plate=83 Col=4 Row=M"
 /clone_lib="Strongylocentrotus purpuratus, purple sea
 urchin, sperm genomic BAC library"
 /note="Organ: sperm; Vector: BACE3.6; BAC Clones in E-Coli
 DH10B"

BASE COUNT

ORIGIN

150 a 93 c 88 g 140 t 7 others
 Query Match 89.5%; Score 17; DB 17; Length 478;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY

Db

3 TAGGAAGTCTGGGTGC 19
 53 TAGGAAGTCTGGGTGC 69

RESULT 3

LOCUS

DEFINITION

BB148197 223 bp mRNA linear EST 28-JUN-2000
 BB148197 RIKEN full-length enriched, adult female vagina Mus
 musculus cDNA clone 9930106105 3', mRNA sequence.

ACCESSION

VERSION

KEYWORDS

SOURCE

BB148197.1 GI:8803134
 EST.
 house mouse.

ORGANISM

Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE

AUTHORS

1 (bases 1 to 223)
 Konno,H., Aizawa,K., Akahira,S., Akiyama,J., Arakawa,T., Carninci,
 P., Endo,T., Fukuda,S., Fukunishi,Y., Hara,A., Hayatsu,N.,
 Hirozane,T., Hori,F., Ishii,Y., Ishikawa,J., Ishikawa,T., Itoh,M.,
 Izawa,M., Kadota,K., Kagawa,I., Kai,C., Kawai,J., Kikuchi,N.,
 Kiyosawa,H., Kojima,Y., Kondo,S., Koya,S., Kurihara,C., Kusakabe,M.,
 Matsuyama,T., Miki,R., Mizuno,Y., Nakamura,M., Oda,H., Okazaki,Y.,
 Ono,T., Owa,C., Saito,H., Sakai,C., Sato,K., Shibata,K., Shibata,
 Y., Shigenoto,Y., Shinagawa,A., Shiraki,T., Sogabe,Y., Sugahara,Y.,
 Suzuki,H., Suzuki,H., Tagawa,A., Takahashi,F., Tominaga,N., Toya,
 T., Tsunoda,Y., Watahiki,A., Watanabe,S., Yamamura,T., Yamanaka,I.,
 Yano,R., Yasunishi,A., Yokota,T., Yoshida,K., Yoshiki,A., Yoshino,
 M., Muramatsu,M. and Hayashizaki,Y.
 RIKEN Mouse ESTs (Konno,H., et al.)
 Unpublished (2000)

TITLE

JOURNAL

COMMENT

Contact: Yoshihide Hayashizaki
 Laboratory for Genome Exploration Research Group, RIKEN Genomic
 Sciences Center(GSC), Yokohama Institute
 The Institute of Physical and Chemical Research (RIKEN)
 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
 Tel: 81-45-503-9222
 Fax: 81-45-503-9216
 Email: genome-res@gsc.riken.go.jp,
 URL:http://genome.gsc.riken.go.jp/
 Carninci,P., Nishiyama,Y., Westover,A., Itoh,M., Nagaoka,S., Sasaki,
 N., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
 Thermostabilization and thermoactivation of thermolabile enzymes by
 trehalose and its application for the synthesis of full length
 cDNA. Proc. Natl. Acad. Sci. U.S.A. 95 (2), 520-524 (1998)
 Itoh,M., Katsunai,T., Akiyama,J., Shibata,K., Izawa,M., Kawai,J.,
 Tomaru,Y., Carninci,P., Shibata,Y., Ozawa,Y., Muramatsu,M., Okazaki,
 Y. and Hayashizaki,Y.
 Automated filtration-based high-throughput plasmid preparation
 system. Genome Res. 9 (5), 463-470 (1999)
 Carninci,P. and Hayashizaki,Y.
 High-efficiency full-length cDNA cloning. Methods Enzymol. 303,
 19-44 (1999)
 Please visit our web site (<http://genome.rtc.riken.go.jp>) for
 further details.

FEATURES

source

Location/Qualifiers

1..223
 /organism="Mus musculus"
 /db_xref="taxon:10090"
 /clone="9930106105"
 /clone_lib="RIKEN full-length enriched, adult female
 vagina"
 /sex="female"
 /tissue_type="vagina"
 /dev_stage="adult"
 /lab_host="DH10B"
 /note="Site:1: Salt; Site:2: BamHI; cDNA library was
 prepared and sequenced in Mouse Genome Encyclopedia
 project of Genome Exploration Research Group in Riken

| | |
|----------|--------|
| | source |
| FEATURES | |

```
1. .302
/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="6030453p10"
/clone_lib="RIKEN full-length
male testis"
/sex="male"
/tissue_type="testis"
/dev_stage="13 days embryo"
```

```

/dev_stage="13 days embryo"
/ab_host="Ph108"
/note_1="Site_1: Sali; Site_2: BamHI. cDNA library was
prepared and sequenced in Mouse Genome Encyclopedia
Project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Science Laboratory in
RIKEN. Division of Experimental Animal Research in Riken
contributed to prepare mouse tissues. 1st strand cDNA was
primed with a primer 15,

```

contributed to prepare mouse tissues. 1st strand cDNA was primed with a primer (5' GAGACAGAGAAGGATCCACAGACGCTCTTTTTTTTTTTTNN 3'), cDNA was prepared by using rRNAase thermo-activated reverse

transcriptase and subsequently enriched for full-length by cap-trapper. cDNA went through one round of normalization to $\text{rot} = 5.0$ and subtraction to $\text{rot} = 100.0$. Second strand cDNA was prepared with the primer adapter of sequence [5', GAGAGAGATGCTTCGAGTGAATTAATTAATTCCTCCCCCCC 3']. cDNA was cloned into the xhoI and bamHI sites. Vector: a modified p Bluescript KS(+) after BamHI excision from Lambda $\text{gt}10$. Cloning sites, 5' end: SalI ; 3' end: BamHI .

```

86.38; Score 16.4; DB 10; Length 302;
ity 94.48; Pred. No. 1.9e+03;
servative 0; Mismatches 1; Indels 0; Gaps 0;

```

CTGGGGTG 18
|||||
CTGGGGTG 45

.1 GF:3364199

and Venter, J.C.,
random BAC End Sequence Database for Sequence-Ready Map
(1998)
hed (1998)
SS: CIT-HSP-2348E20.TR
Mark Adams
ent of Eukaryotic Genomics
stitute for Genomic Research
ical Center Dr., Rockville, MD 20850, USA
838 0200
838 0208

Fax: 301 838 0208

Email: mdadams@tigr.org
 Clones are available from Research Genetics (info@resgen.com). BAC
 end search page:
http://www.tigr.org/ldb/hungen/bac_end_search/bac_end_search.html.
 Seq primer: M13-21
 Class: BAC ends.

FEATURES

Location/Qualifiers
 1..365
 /organism="Homo sapiens"
 /db_xref="taxon:9606"
 /clone="2348E20"
 /clone_lib="CIT-HSP"
 /sex="Male"
 /cell_type="Sperm"
 /note="Vector: pBelOBAC11; Site_1: HindIII; Site_2:
 HindIII"

BASE COUNT 97 a 86 c 88 q 94 t

Query Match 86.3%; Score 16.4; DB 17; Length 365;
 Best Local Similarity 94.4%; Pred. No. 1.9e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 TGTAGGAAGCTCTGGGGTG 18
 ||||| ||||| ||||| |||||
 Db 298 TGTAGGAAGCTCTGGGGTG 281

RESULT 8

AZ739644
 LOCUS
 DEFINITION RPCI-24-71H22-TV RPCI-24 Mus musculus genomic clone RPCI-24-71H22,
 DNA sequence.

ACCESSION AZ739644
 VERSION AZ739644.1 GI:12509933
 KEYWORDS GSS.
 ORGANISM Mus musculus

REFERENCE
 AUTHORS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
 1 (bases 1 to 386)
 Zhao, S., Nierman, W., Malek, J., Shatsman, S., Akinret, B., Levins, M.,
 Tsegaye, G., Geer, K., Krol, M., Shwartsbeyn, A., Gebregorgis, E.,
 Russell, D., de Jong, P. and Fraser, C.M.
 Mouse BAC End Sequences from Library RPCI-24
 Unpublished (1999)
 Other_GSSs: RPCI-24-71H22.TJ
 Contact: Shaying Zhao
 Department of Eukaryotic Genomics
 The Institute for Genomic Research
 9712 Medical Center Dr., Rockville, MD 20850, USA
 Tel: 301 838 0200
 Fax: 301 838 0208
 Email: szhao@tigr.org

Clones are derived from the mouse BAC library RPCI-24. For BAC
 library availability, please contact Pieter de Jong
 (pdejong@mail.cho.org). Clones may be purchased from BACPAC
 Resources (<http://www.choi.org/bacpac/orderingframe.htm>). BAC end
 page: http://www.tigr.org/ldb/bac_ends/mouse/bac_end_intro.html
 Plate: 71 row: H column: 22
 Seq primer: 17
 Class: BAC ends.

FEATURES

Location/Qualifiers
 1..386
 /organism="Mus musculus"
 /strain="C57BL/6J"
 /db_xref="taxon:10090"
 /clone="RPCI-24-71H22"
 /clone_lib="RPCI-24"
 /sex="Male"
 /cell_type="Spleen/Brain"
 /note="Vector: pTAKHAC1; Site_1: BamHI; Site_2: BamHI;
 RPCI-24 Mouse BAC Library produced by Pieter de Jong. The

library was cloned in the pTARBAC1 cloning vector at the
 BamHI sites using MboI partially digested male C57BL/6J
 DNA."

BASE COUNT 96 a 99 c 86 g 105 t

Query Match 86.3%; Score 16.4; DB 17; Length 386;
 Best Local Similarity 94.4%; Pred. No. 1.9e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 TGTAGGAAGCTCTGGGGTG 18
 ||||| ||||| ||||| |||||
 Db 365 TGTAGGAAGCTCTGGGGTG 382

RESULT 9

BI064819/c
 LOCUS
 DEFINITION BI064819 570 bp mRNA linear EST 15-JUN-2001
 pgfin.pk002.j5 normalized chicken fat cDNA library Gallus gallus
 cDNA clone pgfin.pk002.j5 5' similar to gi11525796
 ref|XP_007630.1| KIAA0990 protein [Homo sapiens]G, mRNA sequence.

ACCESSION BI064819
 VERSION BI064819.1 GI:14472341
 KEYWORDS EST.
 SOURCE chicken.
 ORGANISM Gallus gallus

REFERENCE
 AUTHORS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
 Phasianinae; Gallus.
 1 (bases 1 to 570)
 Cogburn, L.A., Morgan, R.W. and Burnside, J.
 Chicken ESTs from fat
 Unpublished (2001)
 Contact: Larry A. Cogburn
 University of Delaware
 Townsend Hall, Newark, DE 19717, USA
 Tel: 302-831-1335
 Fax: 302-831-2822
 Email: cogburn@udel.edu, www.chickest.udel.edu.

FEATURES
 source
 1..570
 /organism="Gallus gallus"
 /db_xref="taxon:9031"
 /clone="pgfin.pk002.j5"
 /clone_lib="normalized chicken fat cDNA library"
 /sex="Male and Female"
 /tissue_type="fat"
 /lab_host="E.coli BMDH108"
 /note="vector: pSPORT1"

BASE COUNT 180 a 102 c 115 g 167 t
 ORIGIN
 Query Match 86.3%; Score 16.4; DB 13; Length 570;
 Best Local Similarity 94.4%; Pred. No. 2e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 TGTAGGAAGCTCTGGGGTG 18
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 Db 355 TGTAGGAAGCTCTGGGGTG 338

RESULT 10
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 LOCUS
 DEFINITION AG074600 660 bp DNA linear GSS 03-NOV-2001
 Pan troglodytes DNA, clone: PTB-066L24.R, genomic survey sequence.
 ACCESSION AG074600
 VERSION AG074600.1 GI:16626402
 KEYWORDS GSS.
 SOURCE Pan troglodytes male lymphoblast DNA, clone_lib:PTB Chimpanzee Male
 BAC Library clone:PTB-066L24.R.
 ORGANISM Pan troglodytes
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Pan.

```

1
REFERENCE
AUTHORS      Fujiyama A., Hattori, M., Toyoda, A., Taylor, T. D., Yada, T.,
              Totoki, Y., Watanabe, H. and Sakaki, Y.
TITLE        BAC end sequences of Library PTB
JOURNAL      Unpublished
AUTHORS      2 (bases 1 to 660)
              Fujiyama A., Hattori, M., Toyoda, A., Taylor, T. D., Yada, T.,
              Totoki, Y., Watanabe, H. and Sakaki, Y.
TITLE        Direct Submission
JOURNAL      Submitted (02-AUG-2001) Asao Fujiyama, The Institute of Physical
              and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
              1-7-22 Suehiro-chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
              (E-mail: chimpan@sc.riken.go.jp, URL: http://hdp.asc.riken.go.jp/,
              Tel: 81-45-503-9111, Fax: 81-45-503-9170)
COMMENT      Clones are derived from the chimpanzee HAC library PTB. This BAC end
              was generated during the R&D process and may have higher chance of
              clone tracking errors.
PRIMERS
Sequencing: M13Rev
LIBRARY
Vector       : pKS145
R.Site 1     : SacI
R.Site 2     : SacI.
Location/Qualifiers
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/db_xref="taxon:9598"
/clone="PTB-066U24.R"
/sex="male"
/cell_type="lymphoblast"
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BASE COUNT   159 a 218 c 137 g 146 t
ORIGIN
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Best Local Similarity 94.4%; Pred. No. 2.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 TCTAGGAAGTCTGGGGTG 18
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Db 321 TGGAGGAAGTCTGGGGTG 304

RESULT 11
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LOCUS       BE873650
DEFINITION BE873650 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3855317 5',
              mRNA sequence.
ACCESSION   BE873650
VERSION     BE873650.1 GI:10322426
KEYWORDS    EST.
SOURCE      human.
ORGANISM    Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1 (bases 1 to 724)
AUTHORS     NIH-MGC http://mgc.nci.nih.gov/.
TITLE       National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL     Unpublished (1999)
COMMENT     Contact: Robert Strausberg, Ph.D.
              Email: cga@bbs-re@mail.nih.gov
              Tissue Procurement: ATCC
              cDNA Library Preparation: Life Technologies, Inc.
              cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
              DNA Sequencing by: Incyte Genomics, Inc.
              Clone distribution: MGC clone distribution information can be
              found through the I.M.A.G.E. Consortium/LLNL at:
              http://image.llnl.gov
              Plate: LLAN9582 row: d column: 06
              High quality sequence start: 4
              High quality sequence stop: 282.
FEATURES
source      1..724

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/lab_host="DH10B (phage-resistant)"
/note="organ: colon; Vector: pCMV-SPORT6; Site_1: Noll;
Site_2: Sail; Cloned unidirectionally. Primer: Oligo dr.
Average insert size 1.8 kb. Library constructed by Life
Technologies."
BASE COUNT   202 a 223 c 137 g 162 t
ORIGIN
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Best Local Similarity 94.4%; Pred. No. 2.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 TGTAGGAAGTCTGGGGTG 18
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Db 678 TGTAGGAAGTCTGGGGTG 661

RESULT 12
CNS0444T/c
LOCUS       CNS0444T
DEFINITION Tetraodon nigroviridis genome survey sequence T7 end of clone
              080L10 of library G from Tetraodon nigroviridis, genomic survey
              sequence.
ACCESSION   AL273638
VERSION     AL273638.1 GI:7995899
KEYWORDS    GSS; genome survey sequence.
SOURCE      Tetraodon nigroviridis.
ORGANISM    Tetraodon nigroviridis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetraodontidae; Tetraodon.
REFERENCE   1 (bases 1 to 974)
AUTHORS     Roest-Crolius, H., Jaillon, O., Dasilva, C., Bouneau, L., Fisher, C.,
              Bernot, A., Fizames, C., Wincker, P., Brottier, P., Quetier, F.,
              Saurin, W. and Weissenbach, J.
TITLE       Human gene number estimate provided by genome wide analysis using
              Tetraodon nigroviridis DNA sequence
JOURNAL     Unpublished
REFERENCE   2 (bases 1 to 974)
AUTHORS     Roest-Crolius, H., Jaillon, O., Dasilva, C., Fizames, C., Fisher, C.,
              Bouneau, L., Billault, A., Quetier, F., Saurin, W., Bernot, A. and
              Weissenbach, J.
TITLE       Characterization and repeat analysis of the compact genome of the
              freshwater pufferfish Tetraodon nigroviridis
JOURNAL     Unpublished
REFERENCE   3 (bases 1 to 974)
AUTHORS     Genoscope.
TITLE       Direct Submission
JOURNAL     Submitted (12-APR-2000)
COMMENT     This sequence is a single read and was generated as part of a large
              scale clone-end sequencing project of the Tetraodon nigroviridis
              genome. For more information, please take a look at
              http://www.genoscope.cns.fr/Tetraodon.
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              /clone="080L10"
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BASE COUNT   288 a 195 c 198 g 290 t 3 others
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Best Local Similarity 94.4%; Pred. No. 2.2e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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California Institute of Technology
Pasadena California 91125, USA
Tel: (626) 395-8421
Fax: (626) 793-3047
Email: acameron@caltech.edu
Plate: 109 row: 0 column: 3
Seq primer: 47
Class: BAC ends
High quality sequence stop: 908.

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Source
1. .908
location/Qualifiers
/organism="Strongylocentrotus purpuratus"
/db_xref="taxon:7668"
/clone="plate-109 Col-3 Row=0"
/clone_lib="Strongylocentrotus purpuratus, purple sea
urchin, sperm genomic BAC library"
/note="Organ: sperm; Vector: BACe3.6; BAC Clones in E-Coli
DH10h"
BASE COUNT 226 a 194 c 169 g 319 t
ORIGIN

Query Match 84.2%; Score 16; db 17; Length 908;
Best Local Similarity 100.0%; Pred. No. 3.3e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4 AGGAATCTGGGGTGC 19
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db 344 AGGAATCTGGGGTGC 319

Search completed: January 21, 2003, 15:38:08
Job time : 1345.03 secs

GenCore version 5.1.1
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: January 21, 2003, 14:55:32 ; Search time 34.3056 Seconds
(without alignments)
246.942 Million cell updates/sec

Title: US-09-853-688-36

Perfect score: 19
Sequence: 1 tttgagaaagctctggggctgc 19

Scoring table: IDENTITY_NUC
Gapop 10.0 , Capext 1.0

Searched: 393868 seqs, 222934149 residues

Total number of hits satisfying chosen parameters: 787736

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

- Published Applications_NA:*
- 1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
 - 2: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
 - 3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
 - 4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
 - 5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
 - 6: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
 - 7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
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 - 12: /cgn2_6/ptodata/1/pubpna/US10_PUBCOMB.seq:*
 - 13: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
 - 14: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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| 2 | 19 | 100.0 | 3700 | 10 | US-09-853-688-5 |
| 3 | 15.8 | 83.2 | 232 | 10 | US-09-728-446-1120 |
| 4 | 15.4 | 81.1 | 170 | 10 | US-09-867-701-388 |
| 5 | 15.4 | 81.1 | 456 | 10 | US-09-864-761-11292 |
| 6 | 15 | 78.9 | 392 | 10 | US-09-917-800A-410 |
| 7 | 15 | 78.9 | 2207 | 10 | US-09-917-800A-1449 |
| 8 | 15 | 78.9 | 24757 | 9 | US-09-764-868-1347 |
| 9 | 14.8 | 77.9 | 317 | 10 | US-09-983-965-2137 |
| 10 | 14.8 | 77.9 | 393 | 10 | US-09-925-300-178 |
| 11 | 14.8 | 77.9 | 558 | 10 | US-09-864-761-16125 |
| 12 | 14.8 | 77.9 | 600 | 10 | US-09-878-574-4575 |
| 13 | 14.8 | 77.9 | 1499 | 10 | US-09-800-729-61 |
| 14 | 14.8 | 77.9 | 3253 | 10 | US-09-764-855-202 |
| 15 | 14.8 | 77.9 | 3606 | 10 | US-09-764-855-203 |
| 16 | 14.8 | 77.9 | 7621 | 10 | US-09-954-456-307 |
| 17 | 14.8 | 77.9 | 7621 | 10 | US-09-954-456-2209 |
| 18 | 14.8 | 77.9 | 10093 | 10 | US-09-764-869-1390 |
| 19 | 14.4 | 75.8 | 459 | 10 | US-09-967-768A-29 |

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| c | 20 | 14.4 | 75.8 | 485 | 10 | US-09-864-761-10605 | Sequence 10605, A |
| c | 21 | 14.4 | 75.8 | 1038 | 10 | US-09-804-682-21 | Sequence 21, Appl |
| c | 22 | 14.4 | 75.8 | 2311 | 10 | US-09-349-015-9 | Sequence 9, Appl |
| c | 23 | 14.4 | 75.8 | 3407 | 10 | US-09-971-845-1 | Sequence 1, Appl |
| c | 24 | 14.4 | 75.8 | 5935 | 10 | US-09-754-949-8 | Sequence 8, Appl |
| c | 25 | 14.4 | 75.8 | 8907 | 9 | US-09-738-626-934 | Sequence 934, App |
| c | 26 | 14.4 | 75.8 | 13747 | 10 | US-09-964-824A-287 | Sequence 287, App |
| c | 27 | 14.4 | 75.8 | 659158 | 9 | US-09-771-208-20 | Sequence 20, Appl |
| c | 28 | 14.2 | 74.7 | 202 | 10 | US-09-783-590-3921 | Sequence 3921, Ap |
| c | 29 | 14.2 | 74.7 | 254 | 10 | US-09-878-574-15524 | Sequence 15524, A |
| c | 30 | 14.2 | 74.7 | 344 | 10 | US-09-920-300A-1145 | Sequence 1145, Ap |
| c | 31 | 14.2 | 74.7 | 344 | 12 | US-10-033-528-1145 | Sequence 1145, Ap |
| c | 32 | 14.2 | 74.7 | 491 | 10 | US-09-864-761-5763 | Sequence 5763, Ap |
| c | 33 | 14.2 | 74.7 | 554 | 10 | US-09-917-800A-346 | Sequence 346, App |
| c | 34 | 14.2 | 74.7 | 586 | 10 | US-09-739-262-3 | Sequence 3, Appl |
| c | 35 | 14.2 | 74.7 | 1874 | 10 | US-09-822-849A-281 | Sequence 281, App |
| c | 36 | 14.2 | 74.7 | 1883 | 10 | US-09-822-849A-518 | Sequence 518, App |
| c | 37 | 14.2 | 74.7 | 2291 | 10 | US-09-883-825-5 | Sequence 5, Appl |
| c | 38 | 14.2 | 74.7 | 2476 | 9 | US-09-774-639-31 | Sequence 31, Appl |
| c | 39 | 14.2 | 74.7 | 5294 | 9 | US-10-098-841-9 | Sequence 9, Appl |
| c | 40 | 14.2 | 74.7 | 6393 | 10 | US-09-764-864-1718 | Sequence 1718, Ap |
| c | 41 | 14.2 | 74.7 | 6815 | 10 | US-09-764-864-1719 | Sequence 1719, Ap |
| c | 42 | 14.2 | 74.7 | 66804 | 10 | US-09-740-041-3 | Sequence 3, Appl |
| c | 43 | 14 | 73.7 | 282 | 10 | US-09-878-574-7318 | Sequence 7318, Ap |
| c | 44 | 14 | 73.7 | 526 | 10 | US-09-864-761-7087 | Sequence 7087, Ap |
| c | 45 | 14 | 73.7 | 3348 | 10 | US-09-917-800A-1477 | Sequence 1477, Ap |

ALIGNMENTS

RESULT 1

US-09-853-688-36
; Sequence 36, Application US/09853688
; Patent No. US20020081605A1
; GENERAL INFORMATION:
; APPLICANT: COOPER, DAVID N.
; APPLICANT: PROCTER, ANNIE M.
; APPLICANT: GREGORY, JOHN
; APPLICANT: MILLAR, DAVID S.
; TITLE OF INVENTION: METHOD FOR DETECTING GROWTH HORMONE VARIATIONS IN HUMANS, THE VARIATIONS AND THEIR USES
; FILE REFERENCE: WCM78
; CURRENT APPLICATION NUMBER: US/09/853.688
; CURRENT FILING DATE: 2001-05-14
; NUMBER OF SEQ ID NOS: 66
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 36
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-853-688-36

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Best Local Similarity 100.0%; Pred. No. 0.91;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Caps 0;

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Db 1 TGTAGGAAGTCTGGGTGC 19

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US-09-853-688-5/c
; Sequence 5, Application US/09853688
; Patent No. US20020081605A1
; GENERAL INFORMATION:
; APPLICANT: COOPER, DAVID N.
; APPLICANT: PROCTER, ANNIE M.
; APPLICANT: GREGORY, JOHN
; APPLICANT: MILLAR, DAVID S.
; TITLE OF INVENTION: METHOD FOR DETECTING GROWTH HORMONE VARIATIONS IN HUMANS, THE VARIATIONS AND THEIR USES

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; FILE REFERENCE: WCM78
; CURRENT APPLICATION NUMBER: US/09/853.688
; CURRENT FILING DATE: 2001-05-14
; NUMBER OF SEQ ID NOS: 66
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 3700
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-853-688-5

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Matches 19; Conservative 0; Mismatches 0;

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Db 3316 TGTAGGAAGCTCTGGGCTGC 3298

RESULT 3
US-09-728-446-1120/c
; Sequence 1120, Application US/09728446
; Patent No. US20020081668A1
; GENERAL INFORMATION:
; APPLICANT: Friedrich, Glenn
; APPLICANT: Zambrowicz, Brian
; APPLICANT: Sands, Arthur T.
; TITLE OF INVENTION: No. US20020081668A1 Murine Polynucleotide Sequences
; FILE REFERENCE: LEX-0101-USA
; CURRENT APPLICATION NUMBER: US/09/728.446
; PRIOR FILING DATE: 2000-11-30
; PRIOR APPLICATION NUMBER: US 60/168,270
; PRIOR FILING DATE: 1999-12-01
; NUMBER OF SEQ ID NOS: 1461
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1120
; LENGTH: 232
; TYPE: DNA
; ORGANISM: Mus musculus
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)...(232)
; OTHER INFORMATION: n = A,T,C or G
US-09-728-446-1120

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Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Db 144 TGAAGGAAGCTCTGGGCTGC 126

RESULT 4
US-09-867-701-388/c
; Sequence 388, Application US/09867701
; Patent No. US20020132237A1
; GENERAL INFORMATION:
; APPLICANT: Aglate, Paul A.
; APPLICANT: Jones, Robert
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION: COMPOSITIONS AND DIAGNOSIS OF OVARIAN CANCER
; FILE REFERENCE: 210121.497
; CURRENT APPLICATION NUMBER: US/09/867.701
; CURRENT FILING DATE: 2001-05-29
; NUMBER OF SEQ ID NOS: 10912
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 388
; LENGTH: 170
; TYPE: DNA
; ORGANISM: Homo sapiens
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; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)...(170)
; OTHER INFORMATION: n = A,T,C or G
US-09-867-701-388

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Best Local Similarity 94.1%; Pred. NO. 67;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GTAGGAAGCTCTGGGCTG 18
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Db 115 GTGGGAAGCTCTGGGCTG 99

RESULT 5
US-09-864-761-11292/c
; Sequence 11292, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharron G.
; APPLICANT: Hanzel, David K.
; APPLICANT: Chen, Wensheng
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
; FILE REFERENCE: Aeonica-X-1
; CURRENT APPLICATION NUMBER: US/09/864.761
; CURRENT FILING DATE: 2001-05-23
; PRIOR FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 60/180,312
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 09/632,366
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/006666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00662
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00661
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 60/234,687
; PRIOR FILING DATE: 2000-09-21
; PRIOR APPLICATION NUMBER: US 09/608,408
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: US 09/774,203
; PRIOR FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 49117
; SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
; SEQ ID NO 11292
; LENGTH: 456
; TYPE: DNA
; ORGANISM: Homo sapiens
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; FEATURE:
; OTHER INFORMATION: MAP TO AC005342.1
; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.84
; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 1.1
; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.2
; OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 0.73
; OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 0.94
; OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.76
US-09-864-761-11292

Query Match      81.1%; Score 15.4; DB 10; Length 456;
Best Local Similarity 94.1%; Pred. No. 73;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 TGTAGGAAGTCTGGGCT 17
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Db 125 TGTAGGAAGTCTGGGCT 109

RESULT 6
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; Sequence 410, Application US/09917800A
; Patent No. US20020119462A1
; GENERAL INFORMATION:
; APPLICANT: Mendrick, Donna
; APPLICANT: Porter, Mark
; APPLICANT: Johnson, Kory
; APPLICANT: Castle, Arthur
; APPLICANT: Elashoff, Michael
; TITLE OF INVENTION: Molecular Toxicology Modeling
; FILE REFERENCE: 44921-5038-US
; CURRENT APPLICATION NUMBER: US/09/917,800A
; CURRENT FILING DATE: 2001-07-31
; PRIOR APPLICATION NUMBER: US 60/222,040
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 60/222,880
; PRIOR FILING DATE: 2000-11-02
; PRIOR APPLICATION NUMBER: US 60/290,029
; PRIOR FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: US 60/290,645
; PRIOR FILING DATE: 2001-05-15
; PRIOR APPLICATION NUMBER: US 60/292,336
; PRIOR FILING DATE: 2001-05-22
; PRIOR APPLICATION NUMBER: US 60/295,798
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 60/297,457
; PRIOR FILING DATE: 2001-06-13
; PRIOR APPLICATION NUMBER: US 60/298,884
; PRIOR FILING DATE: 2001-06-19
; PRIOR APPLICATION NUMBER: US 60/303,459
; NUMBER OF SEQ ID NOS: 1740
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 410
; LENGTH: 392
; TYPE: DNA
; ORGANISM: Rattus norvegicus
; FEATURE:
; OTHER INFORMATION: Genbank Accession No. US20020119462A1 U10357
US-09-917-800A-410

Query Match      78.9%; Score 15; DB 10; Length 392;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 TAGGAAGTCTGGGCT 17
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Db 2036 TAGGAAGTCTGGGCT 2022

RESULT 8
US-09-764-868-1347/c
; Sequence 1347, Application US/09764868
; Patent No. US20020168711A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PT232
; CURRENT APPLICATION NUMBER: US/09/764,868
; CURRENT FILING DATE: 2001-01-17
; Prior application data removed - refer to PALM or file wrapper
; NUMBER OF SEQ ID NOS: 1510
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1347
; LENGTH: 24757
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-764-868-1347

Query Match      78.9%; Score 15; DB 9; Length 24757;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 TAGGAAGTCTGGGCT 17
    |||||
Db 190 TAGGAAGTCTGGGCT 204

RESULT 7
US-09-917-800A-1449/c
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; Sequence 1449, Application US/09917800A
; Patent No. US20020119462A1
; GENERAL INFORMATION:
; APPLICANT: Mendrick, Donna
; APPLICANT: Porter, Mark
; APPLICANT: Johnson, Kory
; APPLICANT: Castle, Arthur
; APPLICANT: Elashoff, Michael
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Molecular Toxicology Modeling
; FILE REFERENCE: 44921-5038-US
; CURRENT APPLICATION NUMBER: US/09/917,800A
; CURRENT FILING DATE: 2001-07-31
; PRIOR APPLICATION NUMBER: US 60/222,040
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 60/222,880
; PRIOR FILING DATE: 2000-11-02
; PRIOR APPLICATION NUMBER: US 60/290,029
; PRIOR FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: US 60/290,645
; PRIOR FILING DATE: 2001-05-15
; PRIOR APPLICATION NUMBER: US 60/292,336
; PRIOR FILING DATE: 2001-05-22
; PRIOR APPLICATION NUMBER: US 60/295,798
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 60/297,457
; PRIOR FILING DATE: 2001-06-13
; PRIOR APPLICATION NUMBER: US 60/298,884
; PRIOR FILING DATE: 2001-06-19
; PRIOR APPLICATION NUMBER: US 60/303,459
; NUMBER OF SEQ ID NOS: 1740
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1449
; LENGTH: 2207
; TYPE: DNA
; ORGANISM: Rattus norvegicus
; FEATURE:
; OTHER INFORMATION: Genbank Accession No. US20020119462A1 U10357
US-09-917-800A-1449

Query Match      78.9%; Score 15; DB 10; Length 2207;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 TAGGAAGTCTGGGCT 17
    |||||
Db 2036 TAGGAAGTCTGGGCT 2022

RESULT 8
US-09-764-868-1347/c
; Sequence 1347, Application US/09764868
; Patent No. US20020168711A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PT232
; CURRENT APPLICATION NUMBER: US/09/764,868
; CURRENT FILING DATE: 2001-01-17
; Prior application data removed - refer to PALM or file wrapper
; NUMBER OF SEQ ID NOS: 1510
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1347
; LENGTH: 24757
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-764-868-1347

Query Match      78.9%; Score 15; DB 9; Length 24757;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 5 GGAAGTCTGGGGTGC 19
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 DB 10501 GGAAGTCTGGGGTGC 10487

RESULT 9

US-09-983-965-2137/c
 ; Sequence 2137, Application US/09983965
 ; Patent No. US20020137160A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Warren, Wesley C.
 ; APPLICANT: Tao, Nengbing
 ; APPLICANT: Ryall, John C.
 ; APPLICANT: Mathialagan, Nadappan
 ; TITLE OF INVENTION: NUCLEIC ACID AND OTHER MOLECULES ASSOCIATED WITH LACTATION AND
 ; FILE OF INVENTION: MUSCLE AND FAT DEPOSITION
 ; FILE REFERENCE: 37-21(10297)C
 ; CURRENT APPLICATION NUMBER: US/09/983,965
 ; CURRENT FILING DATE: 2001-10-26
 ; PRIOR APPLICATION NUMBER: US 09/465,231
 ; PRIOR FILING DATE: 1999-12-15
 ; PRIOR APPLICATION NUMBER: US 60/113,678
 ; PRIOR FILING DATE: 1998-12-17
 ; NUMBER OF SEQ ID NOS: 5912
 ; SEQ ID NO 2137
 ; LENGTH: 317
 ; TYPE: DNA
 ; ORGANISM: Bos taurus
 ; FEATURE:
 ; OTHER INFORMATION: Clone ID: 37-LIB3057-014-Q1-K1-B2
 US-09-983-965-2137

Query Match 77.9%; Score 14.8; DB 10; Length 317;
 Best Local Similarity 88.9%; Pred. No. 1.4e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TGTAGGAAGTCTGGGGTGC 18
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 DB 200 TGAAGGAAGTCTGGGGTGC 183

RESULT 10

US-09-925-300-178/c
 ; Sequence 178, Application US/09925300
 ; Patent No. US20020151681A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Craig Rosen,
 ; APPLICANT: Steve Ruben,
 ; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
 ; FILE REFERENCE: PA101
 ; CURRENT APPLICATION NUMBER: US/09/925,300
 ; CURRENT FILING DATE: 2001-08-10
 ; PRIOR APPLICATION NUMBER: PCT/US00/05988
 ; PRIOR FILING DATE: 2000-03-08
 ; PRIOR APPLICATION NUMBER: 60/124,270
 ; PRIOR FILING DATE: 1999-03-12
 ; NUMBER OF SEQ ID NOS: 1890
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 178
 ; LENGTH: 393
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (214)
 ; OTHER INFORMATION: n equals a,t,g, or c
 US-09-925-300-178

Query Match 77.9%; Score 14.8; DB 10; Length 393;
 Best Local Similarity 84.2%; Pred. No. 1.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 TGTAGGAAGTCTGGGGTGC 19

DB 224 TGTAGCAAGTCTGGGGTGC 206
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RESULT 11

US-09-864-761-16125/c
 ; Sequence 16125, Application US/09864761
 ; Patent No. US20020048763A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Penn, Sharron G.
 ; APPLICANT: Rank, David R.
 ; APPLICANT: Hanzel, David K.
 ; APPLICANT: Chen, Wensheng
 ; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
 ; FILE REFERENCE: Acomica-X-1
 ; CURRENT APPLICATION NUMBER: US/09/864,761
 ; CURRENT FILING DATE: 2001-05-23
 ; PRIOR APPLICATION NUMBER: US 60/180,312
 ; PRIOR FILING DATE: 2000-02-04
 ; PRIOR APPLICATION NUMBER: US 60/207,456
 ; PRIOR FILING DATE: 2000-05-26
 ; PRIOR APPLICATION NUMBER: US 09/632,366
 ; PRIOR FILING DATE: 2000-08-03
 ; PRIOR APPLICATION NUMBER: GB 24263.6
 ; PRIOR FILING DATE: 2000-10-04
 ; PRIOR APPLICATION NUMBER: US 60/236,359
 ; PRIOR FILING DATE: 2000-09-27
 ; PRIOR APPLICATION NUMBER: PCT/US01/00666
 ; PRIOR FILING DATE: 2001-01-30
 ; PRIOR APPLICATION NUMBER: PCT/US01/00667
 ; PRIOR FILING DATE: 2001-01-30
 ; PRIOR APPLICATION NUMBER: PCT/US01/00664
 ; PRIOR FILING DATE: 2001-01-30
 ; PRIOR APPLICATION NUMBER: PCT/US01/00669
 ; PRIOR FILING DATE: 2001-01-30
 ; PRIOR APPLICATION NUMBER: PCT/US01/00665
 ; PRIOR FILING DATE: 2001-01-30
 ; PRIOR APPLICATION NUMBER: PCT/US01/00668
 ; PRIOR FILING DATE: 2001-01-30
 ; PRIOR APPLICATION NUMBER: PCT/US01/00663
 ; PRIOR FILING DATE: 2001-01-30
 ; PRIOR APPLICATION NUMBER: PCT/US01/00662
 ; PRIOR FILING DATE: 2001-01-30
 ; PRIOR APPLICATION NUMBER: PCT/US01/00661
 ; PRIOR FILING DATE: 2001-01-30
 ; PRIOR APPLICATION NUMBER: PCT/US01/00670
 ; PRIOR FILING DATE: 2001-01-30
 ; PRIOR APPLICATION NUMBER: US 60/234,687
 ; PRIOR FILING DATE: 2000-09-21
 ; PRIOR APPLICATION NUMBER: US 09/608,408
 ; PRIOR FILING DATE: 2000-06-30
 ; PRIOR APPLICATION NUMBER: US 09/774,203
 ; PRIOR FILING DATE: 2001-01-29
 ; NUMBER OF SEQ ID NOS: 49117
 ; SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
 ; SEQ ID NO 16125
 ; LENGTH: 558
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; OTHER INFORMATION: MAP TO AC010486.5
 ; OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 0.47
 ; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.46
 US-09-864-761-16125

Query Match 77.9%; Score 14.8; DB 10; Length 558;
 Best Local Similarity 88.9%; Pred. No. 1.5e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GTAGGAAGTCTGGGGTGC 19
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DB 362 CCAGGAAGTCTAGGGTGC 345


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RESULT 12
US-09-878-574-4575
; Sequence 4575, Application US/09878574
; Patent No. US20020110548A1
; GENERAL INFORMATION:
; APPLICANT: Byrum, Joseph R.
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Thompson, Michael D.
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with
; FILE REFERENCE: 38-21(15401)B
; CURRENT APPLICATION NUMBER: US/09/878,574
; CURRENT FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 09/333,535
; PRIOR FILING DATE: 1999-06-14
; NUMBER OF SEQ ID NOS: 15775
; SEQ ID NO 4575
; LENGTH: 600
; TYPE: DNA
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(600)
; OTHER INFORMATION: unsure at all n locations
; OTHER INFORMATION: Clone ID: LIB3028-033-Q1-BJ-II
US-09-878-574-4575

Query Match 77.9%; Score 14.8; DB 10; Length 600;
Best Local Similarity 88.9%; Pred. No. 1.5e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GTAGGAAGTCTGGGTGC 19
I | | | | | | | | | | | | | | | |
Db 464 GGAGGAAGCTGGGGTGC 481

RESULT 13
US-09-800-729-61
; Sequence 61, Application US/09800729
; Patent No. US20020068319A1
; GENERAL INFORMATION:
; APPLICANT: Ni et al.
; TITLE OF INVENTION: 32 Human secreted proteins
; FILE REFERENCE: PZ044P1
; CURRENT APPLICATION NUMBER: US/09/800,729
; CURRENT FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: PCT/US00/26013
; PRIOR FILING DATE: 2000-09-22
; PRIOR APPLICATION NUMBER: 60/155,709
; PRIOR FILING DATE: 1999-09-24
; NUMBER OF SEQ ID NOS: 217
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 61
; LENGTH: 1499
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-800-729-61

Query Match 77.9%; Score 14.8; DB 10; Length 1499;
Best Local Similarity 88.9%; Pred. No. 1.6e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 GTAGGAAGTCTGGGTGC 19
I | | | | | | | | | | | | | | | |
Db 1012 GTAGGAAGCTGGGTGC 1029

RESULT 14
US-09-764-855-202
; Sequence 202, Application US/09764855
; Patent No. US20020119919A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PAL10
; CURRENT APPLICATION NUMBER: US/09/764,855
; CURRENT FILING DATE: 2001-01-17
; Prior application data removed - consult PALM or file wrapper
; NUMBER OF SEQ ID NOS: 334
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 202
; LENGTH: 3253
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-764-855-202

Query Match 77.9%; Score 14.8; DB 10; Length 3253;
Best Local Similarity 88.9%; Pred. No. 1.7e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TGTAGGAAGTCTGGGTG 18
I | | | | | | | | | | | | | | | |
Db 1624 TGGAGGAAGTCTTGGGTG 1641

RESULT 15
US-09-764-855-203
; Sequence 203, Application US/09764855
; Patent No. US20020119919A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PAL10
; CURRENT APPLICATION NUMBER: US/09/764,855
; CURRENT FILING DATE: 2001-01-17
; Prior application data removed - consult PALM or file wrapper
; NUMBER OF SEQ ID NOS: 334
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 203
; LENGTH: 3606
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-764-855-203

Query Match 77.9%; Score 14.8; DB 10; Length 3606;
Best Local Similarity 88.9%; Pred. No. 1.7e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TGTAGGAAGTCTGGGTG 18
I | | | | | | | | | | | | | | | |
Db 1976 TGCAGGAAGTCTTGGGTG 1993

Search completed: January 21, 2003, 16:29:18
Job time : 37.3056 secs
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GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compuen Ltd.

HM nucleic - nucleic search, using sw model

Run on: January 21, 2003, 15:09:37 ; Search time 32.7222 Seconds
(without alignments)
178.070 Million cell updates/sec

Title: US-09-853-688-36

Perfect score: 19

Sequence: 1 lyaugaagctctgggtgc 19

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 441362 seqs, 153338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued_Patents_NA:*

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2: /cgn2.6/ptodata/2/ina/5B.COMB.seq:*

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4: /cgn2.6/ptodata/2/ina/6B.COMB.seq:*

5: /cgn2.6/ptodata/2/ina/PCTUS.COMB.seq:*

6: /cgn2.6/ptodata/2/ina/backfiles.seq:*

pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------|-------------------|
| C 1 | 15.8 | 83.2 | 2246 | 4 | US-09-032-742-3 |
| C 2 | 15.8 | 83.2 | 2246 | 4 | US-09-032-742-21 |
| C 3 | 15.8 | 83.2 | 2246 | 4 | US-09-032-742-22 |
| C 4 | 15.8 | 83.2 | 2246 | 4 | US-09-032-742-24 |
| C 5 | 15.8 | 83.2 | 2246 | 4 | US-09-032-742-25 |
| C 6 | 14.8 | 77.9 | 3388 | 4 | US-09-141-206-1 |
| C 7 | 14.4 | 75.8 | 2511 | 2 | US-08-422-699A-8 |
| C 8 | 14.4 | 75.8 | 2511 | 2 | US-08-422-705B-8 |
| C 9 | 14.4 | 75.8 | 2726 | 2 | US-08-422-699A-12 |
| C 10 | 14.4 | 75.8 | 2726 | 2 | US-08-422-705B-12 |
| C 11 | 14.4 | 75.8 | 3182 | 2 | US-08-484-044-11 |
| C 12 | 14.4 | 75.8 | 3323 | 2 | US-08-422-699A-10 |
| C 13 | 14.4 | 75.8 | 3323 | 2 | US-08-422-705B-10 |
| C 14 | 14.4 | 75.8 | 11613 | 1 | US-08-484-044-10 |
| C 15 | 14.4 | 75.8 | 20303 | 1 | US-08-370-975B-6 |
| C 16 | 14.4 | 75.8 | 26764 | 1 | US-08-370-975B-1 |
| C 17 | 14.4 | 75.8 | 72928 | 3 | US-09-009-913-1 |
| C 18 | 14.2 | 74.7 | 94 | 1 | US-08-909-725-1 |
| C 19 | 14.2 | 74.7 | 586 | 4 | US-09-146-969-3 |
| C 20 | 14.2 | 74.7 | 704 | 4 | US-08-998-416-977 |
| C 21 | 14.2 | 74.7 | 747 | 2 | US-08-401-530A-1 |
| C 22 | 14.2 | 74.7 | 747 | 2 | US-08-709-662-1 |
| C 23 | 14.2 | 74.7 | 1878 | 4 | US-09-732-025-1 |
| C 24 | 14.2 | 74.7 | 2291 | 1 | US-07-872-644-5 |
| C 25 | 14.2 | 74.7 | 2291 | 1 | US-08-297-494-5 |
| C 26 | 14.2 | 74.7 | 2291 | 1 | US-08-297-510-5 |
| C 27 | 14.2 | 74.7 | 2291 | 1 | US-08-479-532-5 |

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| 28 | 14.2 | 74.7 | 2291 | 1 | US-08-455-526-5 | Sequence 5, Appli |
| 29 | 14.2 | 74.7 | 2291 | 1 | US-08-455-525-5 | Sequence 5, Appli |
| 30 | 14.2 | 74.7 | 2291 | 3 | US-09-139-491-5 | Sequence 5, Appli |
| 31 | 14.2 | 74.7 | 2291 | 5 | PCT-US92-03222-5 | Sequence 5, Appli |
| C 32 | 14.2 | 74.7 | 2808 | 3 | US-08-870-126-7 | Sequence 7, Appli |
| C 33 | 14.2 | 74.7 | 2808 | 4 | US-09-445-247-7 | Sequence 7, Appli |
| C 34 | 14 | 73.7 | 3808 | 2 | US-08-916-917-3 | Sequence 3, Appli |
| C 35 | 14 | 73.7 | 3808 | 2 | US-08-972-631-3 | Sequence 3, Appli |
| C 36 | 14 | 73.7 | 3808 | 2 | US-08-972-629-3 | Sequence 3, Appli |
| C 37 | 14 | 73.7 | 3808 | 2 | US-08-672-630-3 | Sequence 3, Appli |
| C 38 | 14 | 73.7 | 3808 | 2 | US-08-672-211-3 | Sequence 3, Appli |
| C 39 | 14 | 73.7 | 3808 | 3 | US-09-225-170-3 | Sequence 3, Appli |
| 40 | 13.8 | 72.6 | 588 | 4 | US-09-385-982-128 | Sequence 128, App |
| 41 | 13.8 | 72.6 | 1646 | 4 | US-09-221-017B-654 | Sequence 654, App |
| C 42 | 13.8 | 72.6 | 2968 | 4 | US-09-813-819-1 | Sequence 1, Appli |
| C 43 | 13.8 | 72.6 | 2968 | 4 | US-09-920-048-1 | Sequence 1, Appli |
| C 44 | 13.8 | 72.6 | 3022 | 4 | US-09-193-562D-33 | Sequence 33, Appli |
| 45 | 13.8 | 72.6 | 11832 | 2 | US-08-416-603-1 | Sequence 1, Appli |

ALIGNMENTS

RESULT 1
US-09-032-742-3/c
; Sequence 3, Application US/09032742
; Patent No. 6255089
; GENERAL INFORMATION:
; APPLICANT: Teitler, Milt
; APPLICANT: Herrick-Davis, Katharine
; TITLE OF INVENTION: Constitutively Activated Serotonin
; TITLE OF INVENTION: Receptors
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Laurence Weinberger
; STREET: 882 S. Matlack Street, Suite 103
; STREET: P.O. Box 1663
; CITY: West Chester
; STATE: PA
; COUNTRY: USA
; ZIP: 19380-0053
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/032.742
; FILING DATE: 27-FEB-1998
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Weinberger, Laurence
; REGISTRATION NUMBER: 27,965
; REFERENCE/DOCKET NUMBER: 3086-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (610) 431-1703
; TELEFAX: (610) 431-4181
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2246 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-032-742-3

Query Match 83.2%; Score 15.8; DB 4; Length 2246;
Best Local Similarity 89.5%; Pred. No. 25;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 TGTAGGAAGCTCTGGGTGC 19
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; LENGTH: 2246 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-032-742-24

Query Match      81.2%  Score 15.8;  DB 4;  Length 2246;
Best Local Similarity 89.5%;  Pred. No. 25;
Matches 17;  Conservative 0;  Mismatches 2;  Indels 0;  Gaps 0;

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QY 1 TGTAGGAAGTCTGGGTCG 19
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DB 2096 TGTAGGAAGTCTGGCCTC 2078

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RESULT 5
; Sequence 25, Application US/09032742
; Patent No. 6255089
; GENERAL INFORMATION:
; APPLICANT: Teitler, Milt
; APPLICANT: Herrick-Davis, Katharine
; APPLICANT: Egan, Christina C.
; TITLE OF INVENTION: Constitutively Activated Serotonin
; TITLE OF INVENTION: Receptors
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Laurence Weinberger
; STREET: 882 S. Matlack Street, Suite 103
; CITY: P.O. Box 1663
; STATE: West Chester
; STATE: PA
; COUNTRY: USA
; ZIP: 19380-0053
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/032,742
; FILING DATE: 27-FEB-1998
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Weinberger, Laurence
; REGISTRATION NUMBER: 27,965
; REFERENCE/DOCKET NUMBER: 3086-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (610) 431-1703
; TELEFAX: (610) 431-4181
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2246 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-032-742-25

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Query Match      83.2%  Score 15.8;  DB 4;  Length 2246;
Best Local Similarity 89.5%;  Pred. No. 25;
Matches 17;  Conservative 0;  Mismatches 2;  Indels 0;  Gaps 0;

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QY 1 TGTAGGAAGTCTGGGTCG 19
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DB 2096 TGTAGGAAGTCTGGCCTC 2078

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RESULT 6
US-09-141-206-1/c
; Sequence 1, Application US/09141206
; Patent No. 6187559

```

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; GENERAL INFORMATION:
; APPLICANT: Steed, Paul M.
; APPLICANT: Lasala, Daniel J.
; TITLE OF INVENTION: Amino Acid Sequence of Human PLD2A
; Patent No. 6187559
; FILE REFERENCE: 4-30148/PL/CCC1954/R
; CURRENT APPLICATION NUMBER: US/09/141,206
; CURRENT FILING DATE: 1998-08-27
; EARLIER APPLICATION NUMBER: 60/057,802
; EARLIER FILING DATE: 1997-08-28
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 3388
; TYPE: DNA
; ORGANISM: Human
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (162)..(2963)
; OTHER INFORMATION: Human PLD2
US-09-141-206-1

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Query Match      77.9%  Score 14.8;  DB 4;  Length 3388;
Best Local Similarity 88.9%;  Pred. No. 86;
Matches 16;  Conservative 0;  Mismatches 2;  Indels 0;  Gaps 0;

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QY 1 TGTAGGAAGTCTGGGTG 18
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DB 1663 TGAAGAAGTCTGGGTG 1646

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RESULT 7
US-08-422-699A-8/c
; Sequence 8, Application US/08422699A
; Patent No. 5955265
; GENERAL INFORMATION:
; APPLICANT: Brook, J. David
; APPLICANT: Housman, David E.
; APPLICANT: Shaw, Duncan J.
; APPLICANT: Harley, Helen G.
; APPLICANT: Johnson, Keith J.
; TITLE OF INVENTION: DNA SEQUENCE ENCODING THE MYOTONIC
; TITLE OF INVENTION: DYSTROPHY GENE AND USES THEREOF
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: US
; ZIP: 02713
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/422,699A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/422,706
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/023,612
; FILING DATE: 26-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/839,255
; FILING DATE: 20-FEB-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/01545
; FILING DATE: 19-FEB-1993
; PRIOR APPLICATION DATA:

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; APPLICATION NUMBER: PCT/GB93/00253
; FILING DATE: 05-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB9202485.0
; FILING DATE: 06-FEB-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: MIT-5830A2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2511 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..1746
;
US-08-422-699A-8

Query Match 75.8%; Score 14.4; DB 2; Length 2511;
Best Local Similarity 93.8%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 AGGAAGTCTGGGGTGC 19
   ||| |||||
DB 590 AGGTAGTCTGGGGTGC 575

RESULT 8
US-08-422-706B-8/c
; Sequence 8, Application US/08422706B
; Patent No. 5977333
; GENERAL INFORMATION:
; APPLICANT: Brook, J. David
; APPLICANT: Housman, David E.
; APPLICANT: Shaw, Duncan J.
; APPLICANT: Harley, Helen G.
; APPLICANT: Johnson, Keith J.
; TITLE OF INVENTION: DNA SEQUENCE ENCODING THE MYOTONIC
; TITLE OF INVENTION: DYSTROPHY GENE AND USES THEREOF
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: US
; ZIP: 02713
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/422,706B
; FILING DATE: 14-APR-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/284,543
; FILING DATE: 08-AUG-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/023,612
; FILING DATE: 26-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/839,255
; FILING DATE: 20-FEB-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/01545
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; FILING DATE: 19-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB93/00253
; FILING DATE: 05-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB9202485.0
; FILING DATE: 06-FEB-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: MIT-5830A2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2511 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..1746
;
US-08-422-706B-8

Query Match 75.8%; Score 14.4; DB 2; Length 2511;
Best Local Similarity 93.8%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 AGGAAGTCTGGGGTGC 19
   ||| |||||
DB 590 AGGTAGTCTGGGGTGC 575

RESULT 9
US-08-422-699A-12/c
; Sequence 12, Application US/08422699A
; Patent No. 5955265
; GENERAL INFORMATION:
; APPLICANT: Brook, J. David
; APPLICANT: Housman, David E.
; APPLICANT: Shaw, Duncan J.
; APPLICANT: Harley, Helen G.
; APPLICANT: Johnson, Keith J.
; TITLE OF INVENTION: DNA SEQUENCE ENCODING THE MYOTONIC
; TITLE OF INVENTION: DYSTROPHY GENE AND USES THEREOF
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: US
; ZIP: 02713
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/422,699A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/422,706
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/023,612
; FILING DATE: 26-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/839,255
; FILING DATE: 20-FEB-1992
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; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-484-044-11

Query Match 75.8%; Score 14.4; DB 1; Length 3182;
Best Local Similarity 93.8%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 4 AGCAAGTCTGGGTGC 19
    ||| ||||| ||||| |||
Db 1288 AGGTAGTCTGGGTGC 1273

RESULT 12
US-08-422-699A-10/c
; Sequence 10, Application US/08422699A
; Patent No. 5955265
; GENERAL INFORMATION:
; APPLICANT: Brook, J. David
; APPLICANT: Housman, David E.
; APPLICANT: Shaw, Duncan J.
; APPLICANT: Harley, Helen G.
; APPLICANT: Johnson, Keith J.
; TITLE OF INVENTION: DNA SEQUENCE ENCODING THE MYOTONIC
; TITLE OF INVENTION: DYSTROPHY GENE AND USES THEREOF
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: US
; ZIP: 02713
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/422.699A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/422.706
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/023.612
; FILING DATE: 26-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/839.255
; FILING DATE: 20-FEB-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/01545
; FILING DATE: 19-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB93/00253
; FILING DATE: 05-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB9202485.0
; FILING DATE: 06-FEB-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: MIT-5830A2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3323 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-422-699A-10

Query Match 75.8%; Score 14.4; DB 2; Length 3323;
Best Local Similarity 93.8%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 4 AGGAAGTCTGGGTGC 19
    ||| ||||| ||||| |||
Db 1375 AGGTAGTCTGGGTGC 1360

RESULT 13
US-08-422-706B-10/c
; Sequence 10, Application US/08422706B
; Patent No. 5977333
; GENERAL INFORMATION:
; APPLICANT: Brook, J. David
; APPLICANT: Housman, David E.
; APPLICANT: Shaw, Duncan J.
; APPLICANT: Harley, Helen G.
; APPLICANT: Johnson, Keith J.
; TITLE OF INVENTION: DNA SEQUENCE ENCODING THE MYOTONIC
; TITLE OF INVENTION: DYSTROPHY GENE AND USES THEREOF
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: US
; ZIP: 02713
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/422.706B
; FILING DATE: 14-APR-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/284.543
; FILING DATE: 08-AUG-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/023.612
; FILING DATE: 26-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/839.255
; FILING DATE: 20-FEB-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/01545
; FILING DATE: 19-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB93/00253
; FILING DATE: 05-FEB-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB9202485.0
; FILING DATE: 06-FEB-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: MIT-5830A2
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;
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3323 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: misc_difference
; LOCATION: replace(518..3323, "")
; OTHER INFORMATION: /standard_name= "cDNA 41"
;
; NAME/KEY: misc_difference
; LOCATION: replace(769..3323, "")
; OTHER INFORMATION: /standard_name= "cDNA 28"
;
US-08-422-706B-10
;
Query Match 75.8%; Score 14.4; DB 2; Length 3323;
Best Local Similarity 93.8%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 AGGAAGTCTGGGGTGC 19
   ||| |||||
DB 1375 AGGTAGTCTGGGGTGC 1360

RESULT 14
US-08-484-044-10/c
; Sequence 10, Application US/08484044
; Patent No. 5552282
; GENERAL INFORMATION:
; APPLICANT: Caskey, C. T.
; APPLICANT: Fu, Ying-Hui
; APPLICANT: Friedman, David L.
; APPLICANT: Pizzulli, Antonio
; APPLICANT: Fenwick, Raymond G.
; TITLE OF INVENTION: Diagnosis of Myotonic Muscular Dystrophy
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fulbright & Jaworski, L.L.P.
; STREET: 1301 McKinney, Suite 5100
; CITY: Houston
; STATE: Texas
; COUNTRY: U.S.A.
; ZIP: 77010-3095
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/484,044
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/019,940
; FILING DATE: 19-FEB-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Paul, Thomas D.
; REGISTRATION NUMBER: 32,714
; REFERENCE/DOCKET NUMBER: D-5443
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 713/651-5325
; TELEFAX: 713/651-5246
; TELEX: 762829
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 11613 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; BEST LOCAL SIMILARITY 93.8%; PRED. NO. 1.7e+02;
; MATCHES 15; CONSERVATIVE 0; MISMATCHES 1; INDELS 0; GAPS 0;

US-08-484-044-10
;
Query Match 75.8%; Score 14.4; DB 1; Length 11613;
Best Local Similarity 93.8%; Pred. No. 1.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 AGGAAGTCTGGGGTGC 19
   ||| |||||
DB 4077 AGGTAGTCTGGGGTGC 4062

RESULT 15
US-08-370-975B-6/c
; Sequence 6, Application US/08370975B
; Patent No. 5622851
; GENERAL INFORMATION:
; APPLICANT: Maley, Frank
; APPLICANT: Maley, Gladys F.
; APPLICANT: Weiner, Karen X.B.
; TITLE OF INVENTION: Human Deoxycytidylate Deaminase Gene
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Nixon, Hargrave, Devans & Doyle
; STREET: Clinton Square, P.O. Box 1051
; CITY: Rochester
; STATE: New York
; COUNTRY: USA
; ZIP: 14603
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/370,975B
; FILING DATE: 10-JAN-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Timlan, Susan J.
; REGISTRATION NUMBER: 34,103
; REFERENCE/DOCKET NUMBER: 20894/80
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (716)263-1636
; TELEFAX: (716)263-1600
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20303 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; POSITION IN GENOME:
; CHROMOSOME/SEGMENT: 4q35
;
US-08-370-975B-6
;
Query Match 75.8%; Score 14.4; DB 1; Length 20303;
Best Local Similarity 93.8%; Pred. No. 1.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 TAGGAAGTCTGGGGTGC 18
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DB 2205 TGGGAAGTCTGGGGTGC 2190

Search completed: January 21, 2003, 16:30:42
Job time : 36.7222 secs
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